

**August 2016**

**Remedial Design Investigation**

**Report**

**Source Area Operable Unit**

**Rockets, Fireworks, and Flares Site**

**EPA ID: CAN000905945**

**Prepared for:**  
Emhart Industries, Inc.

**Prepared by:**  
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November 2016

AECOM Project No. 60438759



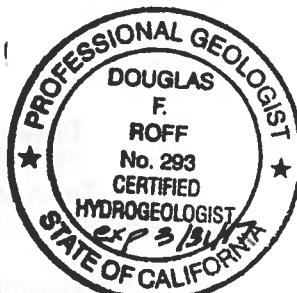
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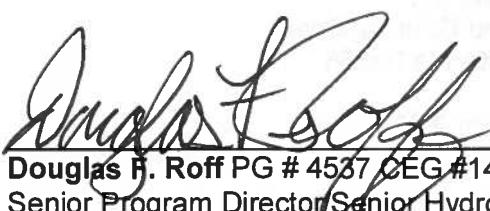
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## ABBREVIATIONS AND ACRONYMS

µg/L	micrograms per liter
AECOM	AECOM Technical Services, Inc.
Blaine Tech	Blaine Tech Services, Inc.
Emhart	Emhart Industries, Inc.
ERM	ERM-West, Inc.
FSP	Final Monitoring Well Installation Work Plan/Field Sampling Plan
GLA	Geo-Logic Associates
QC	quality control
ROD	Record of Decision
SAOU	Source Area Operable Unit
SAP	Sampling and Analysis Plan
Site	Rockets, Fireworks, and Flares Site (formerly the B.F. Goodrich Superfund Site)
TCE	Trichloroethene
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compound

## 1.0 INTRODUCTION

On behalf of Emhart Industries, Inc. (Emhart) AECOM prepared this report to summarize remedial design investigation activities at the Source Area Operable Unit (SAOU) of the Rockets, Fireworks, and Flares Superfund Site (Site). AECOM performed this additional remedial design investigation work in August 2016 in accordance with a USEPA request. The objective of this remedial design investigation work was to provide current water level measurements and volatile organic compound (VOC) and perchlorate concentration data for wells in the SAOU vicinity. The location of the Site is shown on Figure 1. Sampling locations are shown on Figure 2.

This sampling was conducted in accordance with the *Final Sampling and Analysis Plan* (SAP) submitted on 3 May 2013 (ERM-West, Inc. [ERM], 2013a) and *Final Monitoring Well Installation Work Plan/Field Sampling Plan* (FSP) submitted on 1 November 2013 (ERM, 2013c).

This report also includes groundwater monitoring data for the County of San Bernardino (County) Remedy wells collected by Geo-Logic Associates (GLA) on behalf of the County between 11 and 21 July 2016. Data provided by GLA are presented in Table 5 and Appendix A.

### 1.1 Report Organization

This report is organized as follows:

- Section 2.0 summarizes the field activities;
- Section 3.0 summarizes groundwater monitoring results; and
- Section 4.0 presents a list of references used in the preparation of this report.

Appendices to this report include:

- Appendix A – County Data;
- Appendix B – Field Logs;
- Appendix C – Chain-of-Custody Forms and Laboratory Data; and
- Appendix D – Data Validation Reports.

## 2.0 SUMMARY OF FIELD ACTIVITIES

Field activities were conducted by AECOM with subcontractor Blaine Tech Services, Inc. (Blaine Tech) of Carson, California. Between 8 and 16 August 2016, Blaine Tech completed the following groundwater monitoring tasks:

- Calibrated field equipment;
- Measured water levels;
- Measured field water quality parameters; and
- Collected groundwater samples for laboratory analysis.

All field activities were performed in accordance with generally accepted, industry standard procedures as described in detail in the SAP (ERM, 2013a). Blaine Tech recorded all

measurements, including location, time, and date of measurement on the groundwater well sample field logs presented in Appendix B. The water level for well EMW-04 was collected on 9 November 2016 by AECOM.

Decontamination water and excess groundwater generated during field activities were stored in a labelled 55-gallon drum, pending profiling. Profile samples of the decontamination water and excess groundwater were collected and submitted to TestAmerica Laboratories of Irvine, California.

### **3.0 GROUNDWATER MONITORING RESULTS**

This section summarizes the results of groundwater monitoring performed during the August 2016 monitoring event.

Emhart monitored wells: EMW-1(A/B), EMW-6(S/D), EMW-7(S/D), PW-5(A/B/C/D/E), PW-6(A/B/C/D/E), PW-7(A/B/C/D/E/F/G), EPA-MW9(A/B), 1N/5W-34D(2S/3S), EMW-3(A/B/C), EMW-4(A/B/C), EMW-5(A/B/C), PW-2, PW-8(A/B/C/D/E), and Rialto-2 and piezometers PZ-1(S/D), PZ-2(S/D), and PZ-3(S/D).

#### **3.1 Water Level Results**

The depth to groundwater was measured in accordance with the SAP and FSP with the following exceptions:

- GLA reports that it did not measure the water level in well N-18-C1 because that well is damaged.
- GLA reports that it was unable to measure groundwater levels from the following wells because they were dry at the time of the field work: M-1-Shallow, N-1-Shallow, N-2-Shallow, N-3-Deep, N-4-Deep, N-6-Deep, N-7-Deep, N-8-Deep, N-9-Deep, N-9-Shallow, N-11-Deep, N-14-Shallow, N-15-Shallow, M-2-Shallow, and N20-2.

Water levels are presented in Table 1 for piezometers and production, nested, and conventional monitoring wells and Table 2 for Westbay multiport wells. Groundwater elevation data for the Intermediate and Regional Aquifers in the vicinity of the SAOU are shown on Figures 3 and 4, respectively.

#### **3.2 Groundwater Quality Results**

Water quality samples were collected in accordance with the sampling schedule provided in the SAP and FSP for all wells monitored except PW-6A and PW-7A which did not contain sufficient water volume to allow for sample collection.

The sample analysis matrix is summarized in Table 3 and a complete list of analytes and results are provided in Table 4. Trichloroethene (TCE), carbon tetrachloride, and perchlorate are the only constituents of concern for the Site (as defined in the 2010 ROD [USEPA, 2010]) that currently or historically exceeded SAOU cleanup standards. TCE and perchlorate results from the August 2016 monitoring event are presented on Figures 5 and 6. TCE was found to be above the cleanup standard of 5.0 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in 17 out of the 47 sampled locations. TCE concentrations detected ranged from 0.38  $\mu\text{g}/\text{L}$

(EMW-04C) to 350 µg/L (PW-2). Carbon tetrachloride was found to be above the cleanup standard of 0.5 µg/L in only well EMW-04A at a concentration of 2.7 µg/L. Perchlorate was detected above the cleanup standard of 6.0 µg/L in 34 out of the 47 sampled locations. Concentrations detected ranged from 1.4 µg/L (EMW-04C) to 790 µg/L (1N/5W-34D3S).

Perchlorate and TCE concentration data in wells sampled by the County are provided in Table 5.

### 3.3 Data Validation

The data validation process evaluated the analytical data from the wells sampled by AECOM for method quality control (QC) and laboratory QC compliance, and determined the validity and applicability of the data. Data validation was completed internally by AECOM in accordance with the procedures outlined in the *Quality Assurance Project Plan* ([QAPP] ERM, 2013b). Based on the findings of the validation process, data validation qualifiers were assigned along with the rationale for applying a particular laboratory validation qualifier. The validated project data, including qualifiers and reason codes, are represented in Table 4.

Data validation reports for wells sampled by AECOM are provided in Appendix D.

## 4.0 REFERENCES

- ERM. 2013a. *Final Sampling and Analysis Plan*. 3 May.
- ERM. 2013b. *Quality Assurance Project Plan*. 3 May.
- ERM. 2013c. *Final Monitoring Well Installation Work Plan/Field Sampling Plan*.  
1 November.
- U.S. Environmental Protection Agency (USEPA). 2010. *EPA Superfund Interim Action Record of Decision, Source Area Operable Unit, B.F. Goodrich Superfund Site, San Bernardino County, CA*. EPA ID: CAN000905945. 30 September.

## **Tables**

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**TABLE 1. WELL GROUNDWATER ELEVATIONS - CONVENTIONAL WELLS**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 1 of 2)

Location Name	Well	Aquifer	Measure Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Level Elevation (ft msl)	Water Level Source
B-14	B14	NA	05/03/2016	1,616.31	449.33	1,166.98	County
B-22	B22	NA	05/03/2016	1,599.81	NM <sup>(a)</sup>	--	County
B-23	B23-D	NA	05/03/2016	1,619.50	646.99	972.51	County
	B23-S	NA	05/03/2016	1,619.63	451.18	1,168.45	County
F-6	F-6S	Intermediate	07/19/2016	1,577.13	430.88	1,146.25	County
F-6A	F-6A-D	Intermediate	07/11/2016	1,577.56	472.51	1,105.05	County
	F-6A-S	Intermediate	07/11/2016	1,577.80	430.13	1,147.67	County
F-32	F-32	NA	07/19/2016	1,413.77	416.58	997.19	County
M-1	M1-D	Regional	07/11/2016	1,431.32	465.56	965.76	County
	M1-S	Regional	07/11/2016	1,431.42	DRY	--	County
M-4	M4-D	Regional	07/11/2016	1,408.46	443.59	964.87	County
	M4-S	Regional	07/11/2016	1,408.55	443.44	965.11	County
N-1	N1-D	Aquitard	07/11/2016	1,569.74	496.50	1,073.24	County
	N1-S	Intermediate	07/11/2016	1,569.73	DRY	--	County
N-2	N2-D	Intermediate	07/11/2016	1,619.16	465.12	1,154.04	County
	N2-S	Intermediate	07/11/2016	1,619.13	DRY	--	County
N-3	N3-D	Regional	07/11/2016	1,577.31	DRY	--	County
	N3-S	Intermediate	07/11/2016	1,577.28	435.76	1,141.52	County
N-4	N4-D	Regional	07/11/2016	1,647.10	DRY	--	County
N-5	N5-S	Intermediate	07/11/2016	1,593.61	439.69	1,153.92	County
N-6	N6-D	Regional	07/11/2016	1,538.91	DRY	--	County
	N6-S	Intermediate	07/11/2016	1,538.92	427.32	1,111.60	County
N-7	N7-D	NA	07/11/2016	1,541.32	DRY	--	County
	N7-S	Intermediate	07/11/2016	1,541.26	408.66	1,132.60	County
N-8	N8-D	Regional	07/11/2016	1,544.28	DRY	--	County
	N8-S	Intermediate	07/11/2016	1,544.28	419.45	1,124.83	County
N-9	N9-D	Regional	07/11/2016	1,514.92	DRY	--	County
	N9-S	Intermediate	07/11/2016	1,514.92	DRY	--	County
N-10	N10-D	Regional	07/11/2016	1,484.20	513.30	970.90	County
	N10-S	Intermediate	07/11/2016	1,484.20	406.99	1,077.21	County
N-11	N11-D	Regional	07/11/2016	1,460.35	DRY	--	County
	N11-S	Intermediate	07/11/2016	1,460.26	394.29	1,065.97	County
N-12	N12-S	Intermediate	07/11/2016	1,515.03	410.43	1,104.60	County
N-13	N13-D	Regional	07/11/2016	1,470.45	502.26	968.19	County
	N13-S	Intermediate	07/11/2016	1,470.70	385.13	1,085.57	County
N-14	N14-D	Regional	07/11/2016	1,419.85	454.82	965.03	County
	N14-S	Regional	07/11/2016	1,420.00	DRY	--	County
N-15	N15-D	Regional	07/11/2016	1,374.24	412.46	961.78	County
	N15-S	NA	07/11/2016	1,374.28	DRY	--	County
N-16	N16-B	Intermediate	07/11/2016	1,530.74	397.94	1,132.80	County
	N16-C1	Regional	07/11/2016	1,525.87	399.39	1,126.48	County
	N16-C2	Regional	07/11/2016	1,523.87	398.66	1,125.21	County

**TABLE 1. WELL GROUNDWATER ELEVATIONS - CONVENTIONAL WELLS**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 2 of 2)

Location Name	Well	Aquifer	Measure Date	Top of Casing Elevation (ft msl)	Depth to Water (ft btoc)	Water Level Elevation (ft msl)	Water Level Source
N-18	N18-B	Intermediate	07/11/2016	1,425.26	355.91	1,069.35	County
	N18-C1	Regional	07/11/2016	1,425.32	NM <sup>(a)</sup>	--	County
	N18-C2	Regional	07/11/2016	1,425.29	458.45	966.84	County
N-19R	N19R-B	Intermediate	07/11/2016	1,580.35	429.70	1,150.65	County
	N19R-C1	Regional	07/11/2016	1,580.29	604.20	976.09	County
	N19R-C2	Regional	07/11/2016	1,580.24	603.08	977.16	County
S-2	S2-S	Intermediate	07/11/2016	1,511.61	346.59	1,165.02	County
1N/5W-34D2S	1N/5W-34D2S	Regional	08/12/2016	1,463.00	498.59	964.41	Emhart
1N/5W-34D3S	1N/5W-34D3S	Regional	08/12/2016	1,463.00	498.61	964.39	Emhart
RIALTO-2	RIALTO-2	Regional	08/15/2016	1,508.00	482.10	1,025.90	Emhart
EPA-MW9	EPA-MW9A	Regional	08/15/2016	1,448.73	479.08	969.65	Emhart
	EPA-MW9B	Regional	08/15/2016	1,448.63	479.12	969.51	Emhart
PW-2	PW-2	Intermediate	08/16/2016	1,639.36	473.10	1,166.26	Emhart
EMW-01	EMW-01A	Regional	08/15/2016	1,386.48	421.50	964.98	Emhart
	EMW-01B	Regional	08/15/2016	1,386.48	421.50	964.98	Emhart
EMW-03	EMW-03A	Intermediate	08/16/2016	1,500.66	406.47	1,094.19	Emhart
	EMW-03B	Regional	08/16/2016	1,500.61	527.35	973.26	Emhart
	EMW-03C	Regional	08/16/2016	1,500.51	527.24	973.27	Emhart
EMW-04	EMW-04A	Intermediate	11/09/2015	1,549.42	431.52	1,117.90	Emhart
	EMW-04B	Regional	11/09/2015	1,549.32	575.15	974.17	Emhart
	EMW-04C	Regional	11/09/2015	1,549.23	575.11	974.12	Emhart
EMW-05	EMW-05A	Intermediate	08/16/2016	1,573.56	439.44	1,134.12	Emhart
	EMW-05B	Regional	08/16/2016	1,573.42	597.24	976.18	Emhart
	EMW-05C	Regional	08/16/2016	1,573.33	597.32	976.01	Emhart

*Notes:*

<sup>(a)</sup> Damaged

-- not calculated

btoc below top of casing

County County of San Bernardino

Emhart Emhart Industries, Inc.

ft feet

msl mean sea level

NM not measured

**TABLE 2. WELL GROUNDWATER ELEVATIONS - WESTBAY MULTIPORT WELLS  
SOURCE AREA OPERABLE UNIT  
ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
(Page 1 of 2)

Location	Name	Well	Aquifer	Measure Date	Top of Casing Elevation (ft msl)	Pressure Inside Casing (psi)	Pressure Outside Casing (psi)	DTW Inside Casing (ft btoc)	Water Level Elevation <sup>(a)</sup> (ft msl)	Water Level Source
M-2	M2-1		Regional	07/13/2016	1,389.28	--	--	--	DRY	County
	M2-2		Regional	07/13/2016	1,389.28	--	--	--	964.73	County
	M2-3		Regional	07/13/2016	1,389.28	--	--	--	965.51	County
	M2-4		Regional	07/12/2016	1,389.28	--	--	--	965.16	County
	M2-5		Regional	07/12/2016	1,389.28	--	--	--	964.99	County
	M2-6		Regional	07/12/2016	1,389.28	--	--	--	964.99	County
	M2-7		Regional	07/12/2016	1,389.28	--	--	--	965.18	County
M-3	M3-1		Regional	07/11/2016	1,464.24	--	--	--	971.08	County
	M3-2		Regional	07/11/2016	1,464.24	--	--	--	971.18	County
	M3-3		Regional	07/11/2016	1,464.24	--	--	--	969.59	County
	M3-4		Regional	07/11/2016	1,464.24	--	--	--	969.57	County
	M3-5		Regional	07/11/2016	1,464.24	--	--	--	969.72	County
	M3-6		Regional	07/11/2016	1,464.24	--	--	--	969.69	County
	M3-7		Regional	07/11/2016	1,464.24	--	--	--	969.66	County
M-5	M5-1		Intermediate	07/13/2016	1,438.98	--	--	--	1,081.48	County
	M5-2		Regional	07/13/2016	1,438.98	--	--	--	967.89	County
	M5-3		Regional	07/13/2016	1,438.98	--	--	--	969.13	County
	M5-4		Regional	07/13/2016	1,438.98	--	--	--	969.13	County
	M5-5		Regional	07/13/2016	1,438.98	--	--	--	969.11	County
	M5-6		Regional	07/13/2016	1,438.98	--	--	--	969.19	County
	M5-7		Regional	07/13/2016	1,438.98	--	--	--	969.35	County
M-6	M6-1		Intermediate	07/11/2016	1,447.34	--	--	--	1,062.83	County
	M6-2		Regional	07/11/2016	1,447.34	--	--	--	969.81	County
	M6-3		Regional	07/11/2016	1,447.34	--	--	--	969.00	County
	M6-4		Regional	07/11/2016	1,447.34	--	--	--	968.92	County
	M6-5		Regional	07/11/2016	1,447.34	--	--	--	968.98	County
	M6-6		Regional	07/11/2016	1,447.34	--	--	--	968.88	County
	M6-7		Regional	07/11/2016	1,447.34	--	--	--	969.00	County
M-7	M7-1		Intermediate	07/18/2016	1,458.20	--	--	--	1,091.93	County
	M7-2		Intermediate	07/18/2016	1,458.20	--	--	--	1,092.84	County
	M7-3		Regional	07/18/2016	1,458.20	--	--	--	972.27	County
	M7-4		Regional	07/18/2016	1,458.20	--	--	--	972.05	County
	M7-5		Regional	07/18/2016	1,458.20	--	--	--	970.80	County
	M7-6		Regional	07/18/2016	1,458.20	--	--	--	971.96	County
	M7-7		Regional	07/18/2016	1,458.20	--	--	--	969.75	County
M-8	M8-1		Intermediate	07/18/2016	1,427.63	--	--	--	1,069.71	County
	M8-2		Intermediate	07/18/2016	1,427.63	--	--	--	968.06	County
	M8-3		Regional	07/18/2016	1,427.63	--	--	--	967.72	County
	M8-4		Regional	07/18/2016	1,427.63	--	--	--	967.77	County
	M8-5		Regional	07/14/2016	1,427.63	--	--	--	967.38	County
	M8-6		Regional	07/14/2016	1,427.63	--	--	--	967.33	County
	M8-7		Regional	07/14/2016	1,427.63	--	--	--	967.10	County

**TABLE 2. WELL GROUNDWATER ELEVATIONS - WESTBAY MULTIPORT WELLS  
SOURCE AREA OPERABLE UNIT  
ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
(Page 2 of 2)

Location			Measure	Top of Casing	Pressure Inside Casing	Pressure Outside Casing	DTW Inside Casing	Water Level Elevation <sup>(a)</sup> (ft msl)	Water Level Source
Name	Well	Aquifer	Date	Elevation (ft msl)	(psi)	(psi)	(ft btoc)		
N-20	N20-1	Intermediate	07/14/2016	1,501.57	--	--	--	1,118.74	County
	N20-2	Intermediate	07/14/2016	1,501.57	--	--	--	DRY	County
	N20-3	Regional	07/14/2016	1,501.57	--	--	--	973.36	County
	N20-4	Regional	07/13/2016	1,501.57	--	--	--	973.24	County
	N20-5	Regional	07/13/2016	1,501.57	--	--	--	973.35	County
	N20-6	Regional	07/13/2016	1,501.57	--	--	--	973.56	County
PW-5	PW-5A	Regional	08/09/2016	1,423.64	29.29	18.24	432.86	965.29	Emhart
	PW-5B	Regional	08/09/2016	1,423.64	48.90	37.73	432.54	965.33	Emhart
	PW-5C	Regional	08/09/2016	1,423.64	68.52	57.21	432.31	965.24	Emhart
	PW-5D	Regional	08/09/2016	1,423.64	94.65	83.17	431.91	965.25	Emhart
	PW-5E	Regional	08/09/2016	1,423.64	118.64	106.90	431.54	965.02	Emhart
PW-6	PW-6A	Regional	08/08/2016	1,409.16	25.78	14.34	415.90	966.87	Emhart
	PW-6B	Regional	08/08/2016	1,409.16	41.12	28.59	415.65	964.60	Emhart
	PW-6C	Regional	08/08/2016	1,409.16	60.71	48.05	415.32	964.63	Emhart
	PW-6D	Regional	08/08/2016	1,409.16	95.59	82.67	414.85	964.50	Emhart
	PW-6E	Regional	08/08/2016	1,409.16	119.54	106.49	414.52	964.53	Emhart
PW-7	PW-7A	Regional	08/08/2016	1,401.14	31.14	14.35	394.66	967.75	Emhart
	PW-7B	Regional	08/08/2016	1,401.14	59.42	39.34	394.22	960.60	Emhart
	PW-7C	Regional	08/08/2016	1,401.14	89.91	69.62	393.82	960.51	Emhart
	PW-7D	Regional	08/08/2016	1,401.14	120.44	99.91	393.35	960.43	Emhart
	PW-7E	Regional	08/08/2016	1,401.14	142.16	121.54	393.00	960.57	Emhart
	PW-7F	Regional	08/08/2016	1,401.14	170.47	149.66	392.62	960.51	Emhart
	PW-7G	Regional	08/08/2016	1,401.14	198.75	177.74	392.17	960.50	Emhart
PW-8	PW-8A	Intermediate	08/10/2016	1,515.42	14.23	25.12	415.62	1099.80 <sup>(b)</sup>	Emhart
	PW-8B	Regional	08/10/2016	1,515.42	40.91	15.49	485.99	970.79	Emhart
	PW-8C	Regional	08/10/2016	1,515.42	84.46	58.74	485.25	970.83	Emhart
	PW-8D	Regional	08/10/2016	1,515.42	117.08	91.15	484.86	970.74	Emhart
	PW-8E	Regional	08/10/2016	1,515.42	138.82	112.73	484.45	970.78	Emhart

*Notes:*

<sup>(a)</sup> [Water Level Elevation] = [TOC Elevation] - ([Pressure Inside Casing] - [Pressure Outside Casing]) \* 2.307 + [DTW Inside Casing].

<sup>(b)</sup> [Water Level Elevation] = [TOC Elevation] - ([Pressure Outside Casing] - [Atmospheric Pressure]) \* 2.307 - [Depth to Port from TOC].

-- not provided by County of San Bernardino  
 btoc below top of casing  
 County County of San Bernardino  
 DTW depth to water  
 Emhart Emhart Industries, Inc.  
 ft feet  
 msl mean sea level  
 psi pounds per square inch  
 TOC top of casing

**TABLE 3. SAMPLE ANALYSIS MATRIX - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 1 of 2)

Analyte	Method	Reporting Limit	Method Detection Limit	Units
<b>Volatile Organic Compounds</b>				
acetone	EPA 8260B	20	10	µg/L
benzene	EPA 8260B	0.50	0.25	µg/L
bromobenzene	EPA 8260B	1.0	0.25	µg/L
bromochloromethane	EPA 8260B	1.0	0.25	µg/L
bromodichloromethane	EPA 8260B	1.0	0.25	µg/L
bromoform	EPA 8260B	1.0	0.40	µg/L
bromomethane	EPA 8260B	2.0	0.25	µg/L
1,3-butadiene	EPA 8260B	1.0	0.50	µg/L
tert-butanol (TBA)	EPA 8260B	10	5.0	µg/L
2-butanone (MEK)	EPA 8260B	10	2.5	µg/L
n-butylbenzene	EPA 8260B	2.0	0.40	µg/L
sec-butylbenzene	EPA 8260B	2.0	0.25	µg/L
tert-butylbenzene	EPA 8260B	2.0	0.25	µg/L
carbon disulfide	EPA 8260B	2.0	0.50	µg/L
carbon tetrachloride	EPA 8260B	1.0	0.25	µg/L
2-chloro-1,3-butadiene	EPA 8260B	2.0	0.50	µg/L
chlorobenzene	EPA 8260B	1.0	0.25	µg/L
chloroethane	EPA 8260B	1.0	0.40	µg/L
chloroform	EPA 8260B	1.0	0.25	µg/L
chloromethane	EPA 8260B	1.0	0.25	µg/L
2-chlorotoluene	EPA 8260B	2.0	0.25	µg/L
4-chlorotoluene	EPA 8260B	2.0	0.25	µg/L
dibromochloromethane	EPA 8260B	1.0	0.25	µg/L
1,2-dibromo-3-chloropropane	EPA 8260B	2.0	0.50	µg/L
dibromomethane	EPA 8260B	1.0	0.25	µg/L
trans-1,4-dichloro-2-butene	EPA 8260B	5.0	2.5	µg/L
1,2-dichlorobenzene	EPA 8260B	1.0	0.25	µg/L
1,3-dichlorobenzene	EPA 8260B	1.0	0.25	µg/L
1,4-dichlorobenzene	EPA 8260B	1.0	0.25	µg/L
dichlorodifluoromethane	EPA 8260B	1.0	0.40	µg/L
1,1-dichloroethane	EPA 8260B	1.0	0.25	µg/L
1,2-dichloroethane	EPA 8260B	0.50	0.25	µg/L
1,1-dichloroethene	EPA 8260B	1.0	0.25	µg/L
cis-1,2-dichloroethene	EPA 8260B	1.0	0.25	µg/L
trans-1,2-dichloroethene	EPA 8260B	1.0	0.25	µg/L
1,2-dichloropropane	EPA 8260B	1.0	0.25	µg/L
1,3-dichloropropane	EPA 8260B	1.0	0.25	µg/L
2,2-dichloropropane	EPA 8260B	1.0	0.40	µg/L
1,1-dichloropropene	EPA 8260B	1.0	0.25	µg/L
cis-1,3-dichloropropene	EPA 8260B	1.0	0.25	µg/L
trans-1,3-dichloropropene	EPA 8260B	1.0	0.25	µg/L

**TABLE 3. SAMPLE ANALYSIS MATRIX - EMHART DATA  
SOURCE AREA OPERABLE UNIT  
ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
(Page 2 of 2)

Analyte	Method	Reporting Limit	Method Detection Limit	Units
<b>Volatile Organic Compounds (cont'd)</b>				
ethyl tert-butyl ether (ETBE)	EPA 8260B	2.0	0.25	µg/L
ethylbenzene	EPA 8260B	1.0	0.25	µg/L
ethylene dibromide (EDB)	EPA 8260B	1.0	0.25	µg/L
hexachlorobutadiene	EPA 8260B	2.0	0.25	µg/L
2-hexanone	EPA 8260B	10	2.5	µg/L
isopropyl ether (DIPE)	EPA 8260B	2.0	0.25	µg/L
isopropylbenzene	EPA 8260B	1.0	0.25	µg/L
p-isopropyltoluene	EPA 8260B	2.0	0.25	µg/L
methyl tert-butyl ether (MTBE)	EPA 8260B	1.0	0.25	µg/L
4-methyl-2-pentanone (MIBK)	EPA 8260B	10	2.5	µg/L
methylene chloride	EPA 8260B	5.0	0.88	µg/L
naphthalene	EPA 8260B	5.0	0.40	µg/L
n-propylbenzene	EPA 8260B	2.0	0.25	µg/L
styrene	EPA 8260B	1.0	0.25	µg/L
tert-amyl methyl ether (TAME)	EPA 8260B	2.0	0.25	µg/L
1,1,1,2-tetrachloroethane	EPA 8260B	1.0	0.25	µg/L
1,1,2,2-tetrachloroethane	EPA 8260B	1.0	0.25	µg/L
tetrachloroethene (PCE)	EPA 8260B	1.0	0.25	µg/L
toluene	EPA 8260B	1.0	0.25	µg/L
1,2,3-trichlorobenzene	EPA 8260B	2.0	0.40	µg/L
1,2,4-trichlorobenzene	EPA 8260B	2.0	0.40	µg/L
1,1,1-trichloroethane	EPA 8260B	1.0	0.25	µg/L
1,1,2-trichloroethane	EPA 8260B	1.0	0.25	µg/L
trichloroethene (TCE)	EPA 8260B	1.0	0.25	µg/L
trichlorofluoromethane	EPA 8260B	1.0	0.25	µg/L
1,2,3-trichloropropane	EPA 8260B	2.0	0.40	µg/L
1,2,4-trimethylbenzene	EPA 8260B	2.0	0.25	µg/L
1,3,5-trimethylbenzene	EPA 8260B	2.0	0.25	µg/L
vinyl chloride	EPA 8260B	0.50	0.25	µg/L
m- & p-xylene	EPA 8260B	1.0	0.50	µg/L
o-xylene	EPA 8260B	1.0	0.25	µg/L
xylenes, total	EPA 8260B	2.0	0.50	µg/L
<b>General Chemistry</b>				
perchlorate	EPA 314.0	3.0	0.50	µg/L
conductivity	EPA 120.1	1.0	--	µmhos/cm

*Notes:*

µg/L micrograms per liter

µmhos/cm micromhos per centimeter

EPA United States Environmental Protection Agency

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 1 of 6)

Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
1N/5W-34D2S	Rialto ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	NS	5
	05/24/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>36.6</b>	<10	<1.0	<b>1.3</b>
	08/28/2014	N	<b>1.2</b>	<b>6.4 J</b>	<1.0	<1.0	<1.0	<b>64.5</b>	<10	<b>0.26 J</b>	<b>0.63 J</b>
	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>83</b>	<10	<1.0	<1.0
1N/5W-34D3S	08/12/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>130</b>	<10	<1.0	<b>1.1</b>
	05/24/2013	N	<1.0	<b>4.1 J</b>	<1.0	<1.0	<1.0	<b>59.2</b>	<10	<1.0	<b>1.6</b>
	08/28/2014	N	<b>0.49 J</b>	<b>4.5 J</b>	<1.0	<1.0	<1.0	<b>200</b>	<10	<1.0	<b>1.8</b>
	07/28/2015	FD	<b>0.58 J</b>	<b>6.7 J</b>	<1.0	<1.0	<1.0	<b>196</b>	<10	<1.0	<b>2.7</b>
EMW-01A	08/12/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>500</b>	<10	<1.0	<b>2.9</b>
	05/09/2014	N	<2.5	<b>13.7 J</b>	<2.5	<2.5	<2.5	<b>38.0 (J-)</b>	<25	<b>190</b>	<2.5
	08/26/2014	N	<b>1.6</b>	<b>16.2 J</b>	<1.0	<1.0	<1.0	<b>12.6</b>	<10	<b>10.6</b>	<b>2.6</b>
	04/01/2015	FD	<b>1.5</b>	<b>17.6 J</b>	<1.0	<1.0	<1.0	<b>12.7</b>	<10	<b>10.2</b>	<b>2.5</b>
EMW-01B	07/13/2015	N	<b>0.95 J</b>	<b>22.1</b>	<1.0	<1.0	<1.0	<b>4.6 J</b>	<10	<b>3.8</b>	<b>2.4</b>
	08/15/2016	N	<b>0.72</b>	<20	<1.0	<1.0	<1.0	<b>4.9</b>	<10	<b>4.5</b>	<b>2.0</b>
	05/09/2014	FD	<b>0.70</b>	<20	<1.0	<1.0	<1.0	<b>5.1</b>	<10	<b>4.5</b>	<b>2.0</b>
	07/13/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>15</b>	<10	<b>1.2</b>	<b>2.0</b>
EMW-03A	08/15/2016	FD	<0.50	<20	<1.0	<1.0	<1.0	<b>15</b>	<10	<b>0.92 J</b>	<b>2.0</b>
	05/09/2014	N	<b>1.1</b>	<b>22.0</b>	<1.0	<1.0	<1.0	<b>25.1 (J-)</b>	<10	<b>59.3</b>	<b>1.7</b>
	08/26/2014	N	<b>1.6</b>	<b>12.2 J</b>	<1.0	<1.0	<1.0	<b>3.6</b>	<10	<b>154</b>	<1.0
	04/01/2015	N	<1.0	<b>13 J</b>	<1.0	<1.0	<1.0	<b>345</b>	<10	<b>2.3</b>	<b>5</b>
EMW-03B	07/13/2015	N	<b>1.3</b>	<b>21</b>	<1.0	<1.0	<1.0	<b>270</b>	<10	<b>44</b>	<b>3.9</b>
	08/15/2016	N	<b>0.73</b>	<20	<1.0	<1.0	<1.0	<b>380</b>	<10	<b>20</b>	<b>6.0</b>
	05/09/2014	FD	<b>0.43 J</b>	<20	<1.0	<1.0	<1.0	<b>19.1 (J-)</b>	<10	<b>71.1</b>	<b>0.50 J</b>
	08/28/2014	N	<b>1.1</b>	<b>19.1 J</b>	<1.0	<1.0	<1.0	<b>19.7</b>	<10	<b>21.2</b>	<b>0.40 J</b>
EMW-03C	04/01/2015	FD	<b>1.2</b>	<b>22.5</b>	<1.0	<1.0	<1.0	<b>20.7</b>	<10	<b>21.3</b>	<b>0.44 J</b>
	07/28/2015	N	<1.0	<20	<1.0	<1.0	<1.0	<b>16.7</b>	<10	<1.0	<b>0.63 J</b>
	08/16/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>31</b>	<10	<b>2.5</b>	<1.0
	05/09/2014	N	<0.50	<20	<1.0	<1.0	<1.0	<b>28</b>	<10	<b>0.39 J</b>	<b>0.70 J</b>
EMW-03C	08/26/2014	N	<b>1.6 J</b>	<40	<2.0	<2.0	<2.0	<b>68.9 (J-)</b>	<20	<b>149</b>	<b>1.1 J</b>
	04/01/2015	N	<b>1.9</b>	<b>12.4 J</b>	<1.0	<1.0	<1.0	<b>1.2 J</b>	<10	<b>41.2</b>	<b>0.82 J</b>
	07/28/2015	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<b>1.7</b>	<b>1.1</b>
	08/16/2016	N	<b>0.44 J</b>	<20	<1.0	<1.0	<1.0	<1.0	<10	<b>3.6</b>	<b>0.48 J</b>
EMW-03C	05/09/2014	FD	<b>0.59</b>	<20	<1.0	<1.0	<1.0	<1.0	<10	<b>4.1</b>	<b>0.46 J</b>
	08/28/2014	N	<b>1.6 J</b>	<b>47.9 J</b>	<2.5	<2.5	<2.5	<b>0.96 J (J-)</b>	<25	<b>190</b>	<2.5
	04/01/2015	N	<b>1.6</b>	<b>52.2</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>19.5</b>	<1.0
	07/28/2015	N	<b>0.21 J</b>	<b>8.4 J</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>1.7</b>	<1.0
	08/16/2016	N	<b>0.50</b>	<b>16 J</b>	<1.0	<1.0	<1.0	<1.0	<10	<b>7.3</b>	<1.0

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 2 of 6)

Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
	Rialto ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	NS	5
EMW-04A	05/09/2014	N	<1.0	<20	<b>0.41 J</b>	<1.0	<1.0	<b>136 (J-)</b>	<10	<b>4.9</b>	<b>20.6</b>
	08/28/2014	N	<b>0.70 J</b>	<b>15.5 J</b>	<b>0.74 J</b>	<b>0.23 J</b>	<1.0	<b>130</b>	<10	<b>4.6</b>	<b>21.4</b>
	04/01/2015	N	<1.0	<b>10.7 J</b>	<b>0.4 J</b>	<b>0.24 J</b>	<1.0	<b>157</b>	<10	<1.0	<b>24</b>
		FD	<1.0	<b>7.1 J</b>	<b>0.43 J</b>	<b>0.23 J</b>	<1.0	<b>151</b>	<10	<1.0	<b>24.8</b>
	07/27/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>160</b>	<10	<1.0	<b>23</b>
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>160</b>	<10	<1.0	<b>25</b>
EMW-04B	08/15/2016	N	<0.50	<20	<b>2.7</b>	<b>0.36 J</b>	<1.0	<b>120</b>	<10	<1.0	<b>14</b>
	05/09/2014	N	<b>1.9</b>	<20	<1.0	<1.0	<1.0	<b>13.6 (J-)</b>	<10	<b>45.2</b>	<b>4.5</b>
	08/26/2014	N	<b>5.3</b>	<b>36.6</b>	<1.0	<1.0	<1.0	<b>2.8 J</b>	<10	<b>16.6</b>	<b>2.9</b>
	04/01/2015	N	<b>0.29 J</b>	<20	<1.0	<1.0	<1.0	<b>35.8</b>	<10	<b>0.93 J</b>	<b>6.8</b>
	07/27/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>33</b>	<10	<1.0	<b>7.5</b>
	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>7.0</b>	<10	<b>1.6</b>	<b>5.8</b>
EMW-04C	05/09/2014	N	<b>2.2 J</b>	<100	<5.0	<5.0	<5.0	<b>10.0 (J-)</b>	<50	<b>246</b>	<5.0
	08/26/2014	N	<b>1.5</b>	<b>20.2</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>20.7</b>	<b>0.23 J</b>
	04/01/2015	N	<b>0.63 J</b>	<b>6 J</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>7.2</b>	<b>0.34 J</b>
	07/27/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<b>3.2</b>	<1.0
	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>1.4</b>	<10	<b>3.5</b>	<b>0.38 J</b>
	05/09/2014	N	<b>0.32 J</b>	<20	<1.0	<1.0	<1.0	<b>98.5 (J-)</b>	<10	<b>14.3</b>	<b>0.90 J</b>
EMW-05A	05/09/2014	FD	<b>0.64 J</b>	<20	<1.0	<1.0	<1.0	<b>98.8 (J-)</b>	<10	<b>26.1</b>	<b>0.78 J</b>
	08/29/2014	N	<b>0.91 J</b>	<b>9.0 J</b>	<1.0	<1.0	<1.0	<b>99.2</b>	<10	<b>4.1</b>	<b>0.89 J</b>
	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>130</b>	<10	<b>1.3</b>	<b>1.1</b>
	08/16/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>81</b>	<10	<1.0	<b>5.4</b>
EMW-05B	05/09/2014	N	<b>0.89 J</b>	<b>4.0 J</b>	<1.0	<1.0	<1.0	<3.0 (UJ)	<10	<b>15.0</b>	<b>2.0</b>
	08/29/2014	N	<b>1.3</b>	<20	<1.0	<1.0	<1.0	<3.0	<10	<b>3.2</b>	<b>0.61 J</b>
	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/16/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<b>1.9</b>
EMW-05C	05/09/2014	N	<b>0.65 J</b>	<20	<1.0	<1.0	<1.0	<3.0 (UJ)	<10	<b>41.8</b>	<1.0
	08/29/2014	N	<b>0.31 J</b>	<b>9.2 J</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>4.1</b>	<1.0
	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<b>2.2</b>	<1.0
	08/16/2016	N	<b>5.1</b>	<b>77</b>	<2.0	<2.0	<2.0	<1.0	<b>12 J</b>	<b>72</b>	<2.0
EMW-06D	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>62</b>	<10	<b>1.2</b>	<b>11</b>
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>64</b>	<10	<b>0.88 J</b>	<b>9.0</b>
EMW-06S	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>16</b>	<10	<b>0.74 J</b>	<b>2.1</b>
EMW-07D	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>33</b>	<10	<b>2.2</b>	<b>1.1</b>
EMW-07S	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>57</b>	<10	<b>0.98 J</b>	<b>2.9</b>
EPA-MP4A	05/22/2013	N	<1.0	<20	<1.0	<1.0	<b>0.22 J</b>	<3.0	<10	<1.0	<b>0.78 J</b>
	08/29/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>3.2</b>	<10	<1.0	<b>0.95 J</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
EPA-MP4B	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>0.68 J</b>
	08/29/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>1.4 J</b>	<10	<1.0	<b>0.32 J</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
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Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
EPA-MP4C	Rialto ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	NS	5
	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>2.9</b>
	08/29/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>0.87 J</b>	<10	<1.0	<b>1.2</b>
	07/16/2015	FD	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>1.5</b>
		N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>1.9</b>
EPA-MP4D	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>5.5</b>	<10	<1.0	<b>4.3</b>
		FD	<1.0	<20	<1.0	<1.0	<1.0	<b>5.4</b>	<10	<1.0	<b>6.0</b>
	08/29/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>0.92 J</b>	<10	<1.0	<b>6.0</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>2.5</b>
EPA-MP4E	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
		FD	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/29/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
		FD	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
EPA-MW9A	05/24/2013	N	<b>0.95 J</b>	<b>7.7 J</b>	<1.0	<1.0	<b>199</b>	<10	<b>20.5</b>	<b>7.5</b>	
	08/28/2014	N	<b>4.8</b>	<b>24.3</b>	<1.0	<1.0	<1.0	<b>2.1 J</b>	<10	<b>192</b>	<1.0
	07/30/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>60</b>	<10	<b>3.1</b>	<b>3.8</b>
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>61</b>	<10	<b>3.1</b>	<b>3.6</b>
	08/15/2016	N	<b>0.83</b>	<20	<1.0	<1.0	<1.0	<b>40 (J)</b>	<10	<b>25 (J)</b>	<b>2.9</b>
EPA-MW9B		FD	<b>0.54</b>	<20	<1.0	<1.0	<1.0	<b>62 (J)</b>	<10	<b>14 (J)</b>	<b>3.0</b>
	05/24/2013	N	<1.0	<b>5.3 J</b>	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/28/2014	N	<b>0.26 J</b>	<b>10.0 J</b>	<1.0	<1.0	<1.0	<3.0	<10	<b>0.55 J</b>	<1.0
	07/29/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PW-2	08/15/2016	N	<b>0.49 J</b>	<20	<1.0	<1.0	<1.0	<1.0	<10	<b>1.6</b>	<1.0
	05/24/2013	N	<b>1.2</b>	<b>4.3 J</b>	<1.0	<b>0.51 J</b>	<b>0.29 J</b>	<b>59.1</b>	<10	<1.0	<b>91.4</b>
	08/28/2014	N	<1.0	<20	<1.0	<b>0.61 J</b>	<b>0.25 J</b>	<b>22.4</b>	<10	<1.0	<b>111</b>
	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>87</b>	<10	<1.0	<b>150</b>
PW-3	08/16/2016	N	<2.5	<100	<5.0	<b>2.1 J</b>	<5.0	<b>570</b>	<50	<5.0	<b>350</b>
	05/24/2013	N	<1.0	<20	<1.0	<b>2.2</b>	<1.0	<b>32.0</b>	<10	<1.0	<b>15.9</b>
	08/28/2014	N	<1.0	<20	<1.0	<b>1.5</b>	<1.0	<b>28.5</b>	<10	<1.0	<b>11.5</b>
PW-4	07/28/2015	N	<0.50	<20	<1.0	<b>1.6</b>	<1.0	<b>11</b>	<10	<1.0	<b>6.4</b>
	05/24/2013	N	<b>0.39 J</b>	<b>6.6 J</b>	<1.0	<1.0	<1.0	<b>18.3</b>	<10	<1.0	<b>13.1</b>
	08/28/2014	N	<1.0	<b>5.3 J</b>	<1.0	<1.0	<1.0	<b>23.3</b>	<10	<1.0	<b>28.9</b>
PW-5A	07/28/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>20</b>	<10	<1.0	<b>27</b>
	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>169</b>	<10	<1.0	<b>0.26 J</b>
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>101</b>	<10	<1.0	<b>2.7</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>54</b>	<10	<1.0	<b>1.7</b>
PW-5B	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>39</b>	<10	<1.0	<b>1.5</b>
	05/21/2013	N	<1.0	<20	<1.0	<b>0.23 J</b>	<1.0	<b>192</b>	<b>2.9 J</b>	<1.0	<b>31.4</b>
	08/28/2014	N	<1.0	<20	<1.0	<b>0.34 J</b>	<1.0	<b>136</b>	<10	<1.0	<b>36.3</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>82</b>	<10	<1.0	<b>24</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>63</b>	<10	<1.0	<b>18</b>

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
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Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
	Rialto ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	NS	5
PW-5C	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>140</b>	<10	<1.0	<b>21.2</b>
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>153</b>	<10	<1.0	<b>19.8</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>180</b>	<10	<1.0	<b>34</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>160</b>	<10	<1.0	<b>29</b>
PW-5D	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>908</b>	<10	<1.0	<b>21.0</b>
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>666</b>	<10	<1.0	<b>21.9</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>530</b>	<10	<1.0	<b>35</b>
		N	<0.50	<20	<1.0	<1.0	<1.0	<b>510</b>	<10	<1.0	<b>23</b>
	08/09/2016	FD	<0.50	<20	<1.0	<1.0	<1.0	<b>500</b>	<10	<1.0	<b>21</b>
PW-5E	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>274</b>	<10	<1.0	<b>4.4</b>
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>299</b>	<10	<1.0	<b>6.9</b>
	07/16/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>410</b>	<10	<1.0	<b>22</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>320</b>	<10	<1.0	<b>18</b>
PW-6A	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>54.1</b>	<10	<1.0	<b>1.5</b>
PW-6B	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>59.2</b>	<10	<1.0	<b>2.7</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>123</b>	<10	<1.0	<b>4.4</b>
	07/15/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>140</b>	<10	<1.0	<b>3.9</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>99</b>	<10	<1.0	<b>7.2</b>
	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>18.1</b>	<10	<1.0	<b>0.93 J</b>
PW-6C	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>42.5</b>	<10	<1.0	<b>4.1</b>
	07/15/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>84</b>	<10	<1.0	<b>6.2</b>
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>84</b>	<10	<1.0	<b>5.8</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>160</b>	<10	<1.0	<b>9.9</b>
PW-6D	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>197</b>	<10	<1.0	<b>3.1</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>420</b>	<10	<1.0	<b>9.1</b>
	07/15/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>430</b>	<10	<1.0	<b>16</b>
	08/09/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>420</b>	<10	<1.0	<b>13</b>
PW-6E	05/21/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
		FD	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	07/15/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PW-7B	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>2.3 J</b>	<10	<1.0	<1.0
	05/23/2013	N	<1.0	<20	<1.0	<b>0.28 J</b>	<1.0	<b>3.1</b>	<10	<1.0	<1.0
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>4.0</b>	<10	<1.0	<b>0.89 J</b>
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PW-7C	08/08/2016	N	<0.50	<20	<1.0	<b>0.26 J</b>	<1.0	<b>2.3 J</b>	<10	<1.0	<1.0
	05/23/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>7.6</b>	<10	<1.0	<b>0.66 J</b>
		FD	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>0.65 J</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>6.2</b>	<10	<1.0	<b>1.1</b>
PW-7C	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>4.3</b>	<10	<1.0	<1.0
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>4.0</b>	<10	<1.0	<1.0
	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>6.2</b>	<10	<1.0	<b>0.66 J</b>
		FD	<0.50	<20	<1.0	<1.0	<1.0	<b>6.4</b>	<10	<1.0	<b>0.73 J</b>

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
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Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
	Rialto ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	NS	5
PW-7D	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<b>0.24 J</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>1.1 J</b>	<10	<1.0	<1.0
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PW-7E	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>49.9</b>	<10	<1.0	<b>4.5</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>33.0</b>	<10	<1.0	<b>3.9</b>
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>21</b>	<10	<1.0	<b>2.9</b>
	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>35</b>	<10	<1.0	<b>1.6</b>
PW-7F	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>26.7</b>	<10	<1.0	<b>0.85 J</b>
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>31.7</b>	<10	<1.0	<b>0.75 J</b>
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>40 (J)</b>	<10	<1.0	<b>1.8</b>
	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>59</b>	<10	<1.0	<b>3.5</b>
PW-7G	05/22/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/27/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>4.6</b>	<10	<1.0	<1.0
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>5.1</b>	<10	<1.0	<1.0
	08/08/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>11</b>	<10	<1.0	<b>0.46 J</b>
PW-8A	05/23/2013	N	<1.0	<20	<b>0.20 J (J)</b>	<b>0.32 J</b>	<1.0	<b>73.2</b>	<10	<1.0	<b>29.3</b>
	08/28/2014	N	<1.0	<20	<b>0.25 J</b>	<b>0.32 J</b>	<1.0	<b>150</b>	<10	<1.0	<b>22.6</b>
	07/20/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>42</b>	<10	<1.0	<b>14</b>
	08/10/2016	N	<0.50	<20	<1.0	<b>0.28 J</b>	<1.0	<b>43</b>	<10	<1.0	<b>10</b>
PW-8B	05/23/2013	N	<1.0	<20	<1.0	<b>0.24 J</b>	<1.0	<b>109</b>	<10	<1.0	<b>26.6</b>
	08/28/2014	N	<1.0	<20	<1.0	<b>0.38 J</b>	<1.0	<b>88.0</b>	<10	<1.0	<b>34.5</b>
	07/20/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>98</b>	<10	<1.0	<b>19</b>
	08/10/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>89</b>	<10	<1.0	<b>17</b>
PW-8C	05/23/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<b>18.3</b>	<10	<1.0	<b>0.52 J</b>
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>44.0</b>	<10	<1.0	<b>0.54 J</b>
	07/20/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<b>44</b>	<10	<1.0	<1.0
	08/10/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>43</b>	<10	<1.0	<b>0.97 J</b>
PW-8D	05/23/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	07/20/2015	FD	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/10/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PW-8E	05/23/2013	N	<1.0	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/28/2014	N	<1.0	<20	<1.0	<1.0	<1.0	<b>0.81 J</b>	<10	<1.0	<1.0
	07/17/2015	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
	08/10/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0	<10	<1.0	<1.0
PZ-1D	7/22/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>6.7 (J)</b>	<10	<1.0	<1.0
PZ-1S	7/22/2016	FD	<0.50	<20	<1.0	<1.0	<1.0	<b>8.0 (J)</b>	<10	<1.0	<1.0
PZ-2D	7/22/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>180 (J)</b>	<10	<b>1.1</b>	<b>23</b>
PZ-2S	7/22/2016	N	<2.5	<100	<5.0	<5.0	<5.0	<b>33 (J)</b>	<50	<b>230</b>	<5.0

**TABLE 4. GROUNDWATER SUMMARY TABLE - EMHART DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
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Well	Sampling Date	Sample Type	1,2-DCA	acetone	carbon tetrachloride	chloroform	MTBE	perchlorate	TBA	toluene	TCE
	Rialto	ROD MCL	NS	NS	0.5	80	NS	6	NS	NS	5
PZ-3D	7/22/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<3.0 (UJ)	<10	<b>1.6</b>	<1.0
PZ-3S	7/22/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>36 (J)</b>	<10	<b>2.9</b>	<b>2.8</b>
RIALTO-2	08/15/2016	N	<0.50	<20	<1.0	<1.0	<1.0	<b>9.9</b>	<10	<1.0	<b>4.1</b>

*Notes:*

Results in micrograms per liter ( $\mu\text{g/L}$ ).

**Bolded** values indicate detected concentrations.

**Shaded** values indicate concentrations exceeding the cleanup standard established in the 2010 ROD.

<	less than	N	normal environmental sample
DCA	dichloroethane	NS	no standard
FD	field duplicate	ROD	Record of Decision
MCL	maximum contaminant level	TBA	tert-butanol
MDL	method detection limit	TCE	trichloroethene
MTBE	methyl tert-butyl ether		

*Laboratory-Assigned Qualifier*

J      Estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.

*Data Validation Qualifiers*

(J)      Indicates an estimated value.

(J-)      Indicates an estimated value - low bias.

(UJ)      The analyte is ND but the result is an estimate due to QC failure or data quality limitations.

**TABLE 5. GROUNDWATER SUMMARY TABLE - COUNTY DATA  
SOURCE AREA OPERABLE UNIT  
ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
(Page 1 of 3)

Well	Sampling Date	perchlorate		TCE
		RL	MDL	
	Rialto ROD MCL	6	5	
F-27	7/19/2016	<0.72	<b>0.35</b>	
F-32	7/21/2016	<0.72	<0.085	
F-33B	7/19/2016	<0.72	<b>0.13</b>	
F-34B	7/19/2016	<0.72	<0.085	
F-35D	7/21/2016	<b>1.6</b>	<b>0.33</b>	
F-35S	7/21/2016	<b>3.5</b>	<b>0.11</b>	
F-36D	7/21/2016	<b>0.74</b>	<b>0.20</b>	
F-36S	7/21/2016	<b>7.9</b>	<b>0.20</b>	
F-6	7/19/2016	<b>1.1</b>	<b>4.8</b>	
F-6A-D	7/14/2016	<0.72	<b>0.19</b>	
F-6A-S	7/19/2016	<b>2.0</b>	<b>4.3</b>	
F-7	7/19/2016	<0.72	<0.085	
F-8	7/19/2016	<0.72	<0.085	
F-9	7/19/2016	<0.72	<0.085	
M1-D	7/11/2016	<b>8.7</b>	<b>0.88</b>	
M2-2	7/13/2016	<b>16</b>	<b>1.5</b>	
M2-3	7/13/2016	<b>22</b>	<b>1.1</b>	
M2-4	7/12/2016	<b>18</b>	<b>1.1</b>	
M2-5	7/12/2016	<b>0.83</b>	<0.085	
M2-6	7/12/2016	<0.72	<0.085	
M2-7	7/12/2016	<0.72	<0.085	
M3-1	7/11/2016	<b>32</b>	<b>19</b>	
M3-2	7/11/2016	<b>43</b>	<b>29</b>	
M3-3	7/11/2016	<b>38</b>	<b>29</b>	
M3-4	7/11/2016	<b>38</b>	<b>28</b>	
M3-5	7/11/2016	<b>28</b>	<b>15</b>	
M3-6	7/11/2016	<b>40</b>	<b>18</b>	
M3-7	7/11/2016	<b>3.0</b>	<b>1.1</b>	
M4-D	7/11/2016	<0.72	<0.085	
M4-S	7/11/2016	<b>2.6</b>	<b>0.085</b>	
M5-1	7/13/2016	<b>1.5</b>	<b>0.63</b>	
M5-2	7/13/2016	<b>2.4</b>	<b>0.75</b>	
M5-3	7/13/2016	<b>1.1</b>	<0.085	
M5-4	7/13/2016	<b>2.3</b>	<0.085	
M5-5	7/13/2016	<b>0.82</b>	<0.085	
M5-6	7/13/2016	<0.72	<0.085	
M5-7	7/13/2016	<0.72	<0.085	
M6-1	7/11/2016	<b>3.7</b>	<b>2.3</b>	
M6-2	7/11/2016	<b>11</b>	<b>1.6</b>	
M6-3	7/11/2016	<b>18</b>	<b>7.8</b>	
M6-4	7/11/2016	<0.72	<0.085	

**TABLE 5. GROUNDWATER SUMMARY TABLE - COUNTY DATA  
SOURCE AREA OPERABLE UNIT  
ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
(Page 2 of 3)

Well	Sampling		TCE
	Date	perchlorate	
	RL	4.0	
	MDL	0.72	0.085
	Rialto ROD MCL	6	5
M6-5	7/11/2016	<0.72	<0.085
M6-6	7/11/2016	<0.72	<0.085
M6-7	7/11/2016	<0.72	<0.085
M7-1	7/18/2016	<b>1.1</b>	<b>0.54</b>
M7-2	7/18/2016	<0.72	<b>0.41</b>
M7-3	7/18/2016	<0.72	<b>0.24</b>
M7-4	7/18/2016	<0.72	<b>0.22</b>
M7-5	7/18/2016	<0.72	<b>0.17</b>
M7-6	7/18/2016	<0.72	<b>0.17</b>
M7-7	7/18/2016	<0.72	<0.085
M8-1	7/18/2016	<0.72	<b>0.66</b>
M8-2	7/18/2016	<0.72	<b>0.16</b>
M8-3	7/18/2016	<b>0.78</b>	<b>0.13</b>
M8-4	7/18/2016	<0.72	<b>0.085</b>
M8-5	7/14/2016	<0.72	<0.085
M8-6	7/14/2016	<0.72	<0.085
M8-7	7/14/2016	<0.72	<0.085
N10-D	7/13/2016	<b>13</b>	<b>3.6</b>
N10-S	7/13/2016	<b>19</b>	<b>8.4</b>
N11-S	7/13/2016	<b>11</b>	<b>1.6</b>
N12-S	7/13/2016	<b>8.6</b>	<b>14</b>
N13-D	7/12/2016	<b>110</b>	<b>25</b>
N13-S	7/12/2016	<b>6.2</b>	<b>0.67</b>
N14-D	7/11/2016	<0.72	<0.085
N15-D	7/11/2016	<0.72	<0.085
N16-B	7/12/2016	<0.72	<b>0.47</b>
N16-C1	7/12/2016	<b>1.3</b>	<0.085
N16-C2	7/12/2016	<b>1.8</b>	<0.085
N18-B	7/12/2016	<0.72	<b>0.65</b>
N18-C2	7/12/2016	<b>3.5</b>	<0.085
N19R-B	7/13/2016	<b>3.6</b>	<b>3.8</b>
N19R-C1	7/13/2016	<0.72	<0.085
N19R-C2	7/13/2016	<b>2.9</b>	<b>3.2</b>
N1-D	7/13/2016	<b>4.7</b>	<b>2.0</b>
N20-1	7/14/2016	<0.72	<b>0.73</b>
N20-3	7/14/2016	<0.72	<b>0.45</b>
N20-4	7/13/2016	<0.72	<0.085
N20-5	7/13/2016	<0.72	<0.085
N20-6	7/13/2016	<0.72	<0.085
N2-D	7/14/2016	<0.72	<0.085
N3-S	7/19/2016	<b>11</b>	<b>4.4</b>
N5-S	7/14/2016	<0.72	<b>0.094</b>

**TABLE 5. GROUNDWATER SUMMARY TABLE - COUNTY DATA**  
**SOURCE AREA OPERABLE UNIT**  
**ROCKETS, FLARES, AND FIREWORKS SUPERFUND SITE**  
 (Page 3 of 3)

Well	Sampling Date	perchlorate		TCE
		RL	4.0	
		MDL	0.72	0.085
	Rialto ROD MCL		6	5
N6-S	7/13/2016		<b>14</b>	<b>2.6</b>
N7-S	7/14/2016		<b>5.4</b>	<0.085
N8-S	7/12/2016		<b>7.4</b>	<b>11</b>

*Notes:*

Results in micrograms per liter ( $\mu\text{g}/\text{L}$ ).

**Bolded** values indicate detected concentrations.

**Shaded** values indicate concentrations exceeding the cleanup standard established in the 2010 ROD.

MCL maximum contaminant level

MDL method detection limit

RL reporting limit

ROD Record of Decision

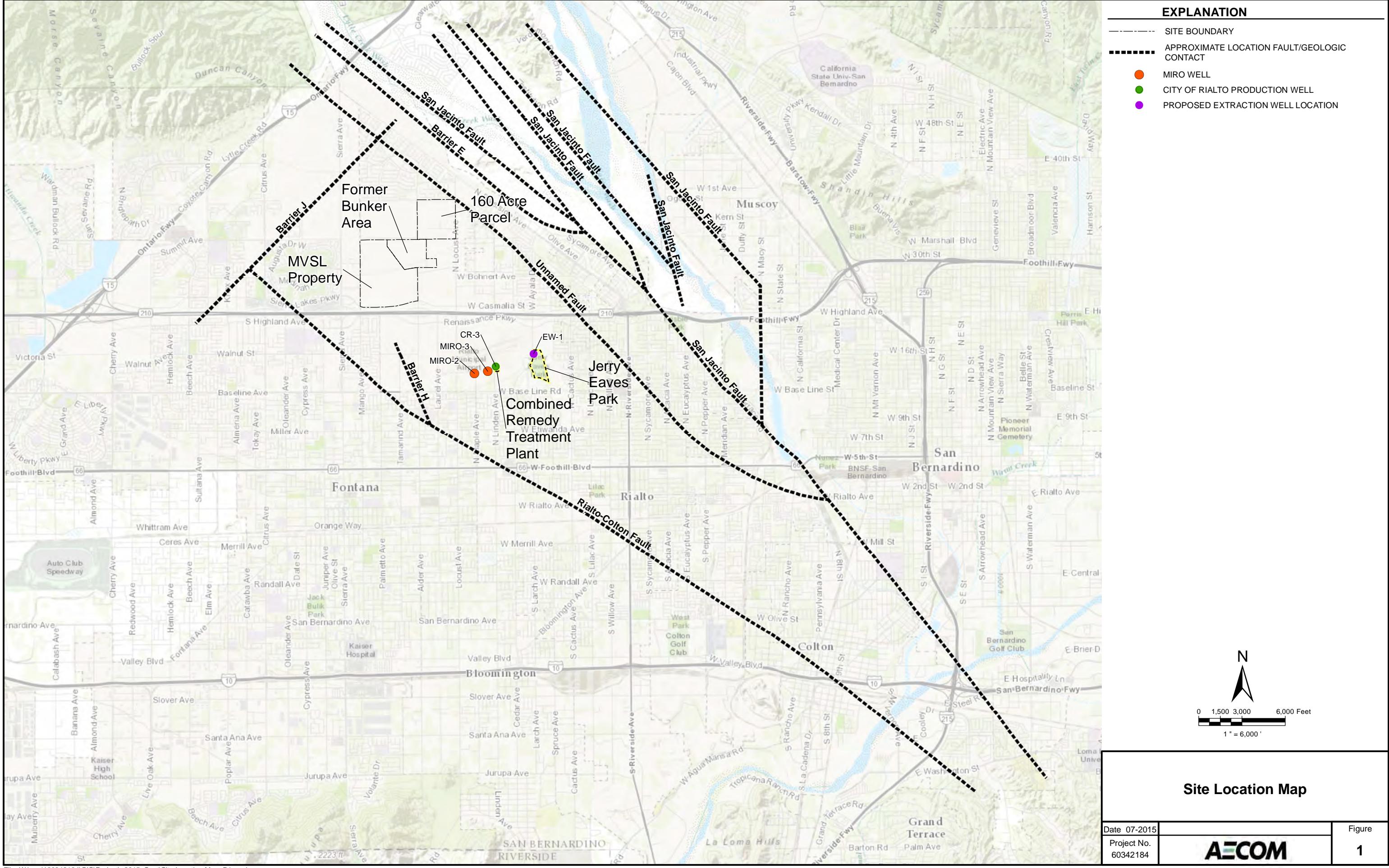
TCE trichloroethene

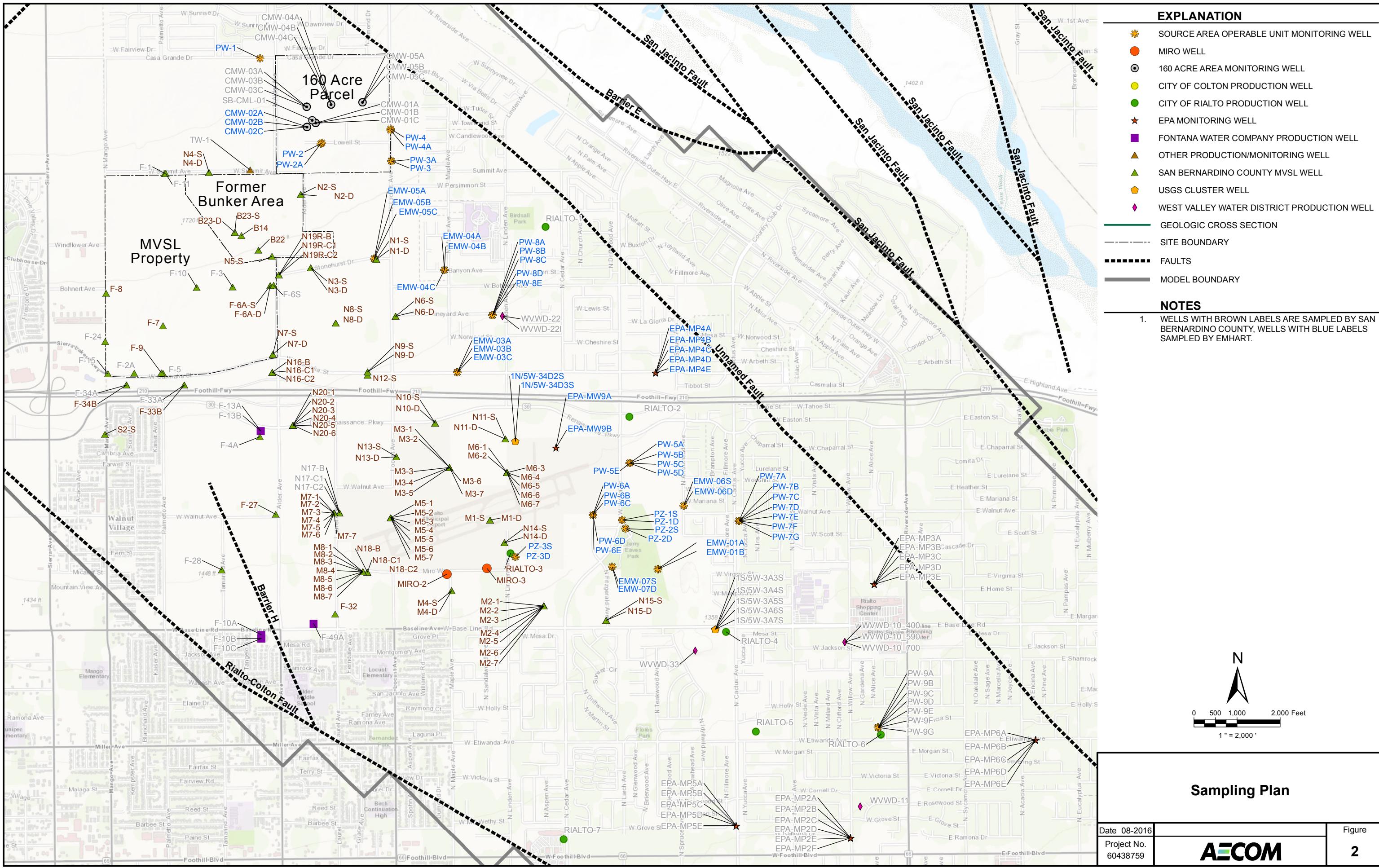
*Laboratory-Assigned Qualifier*

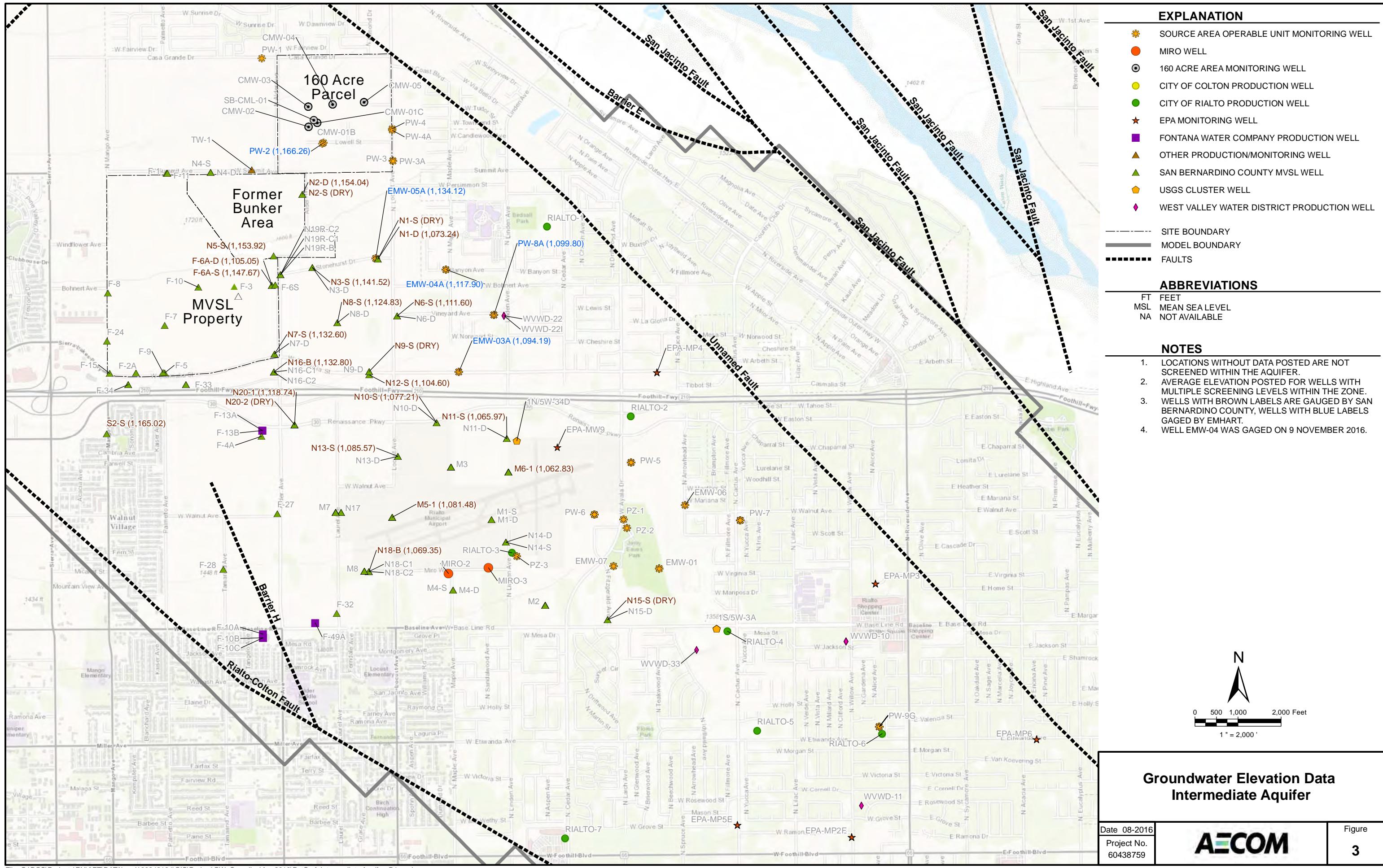
J Estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.

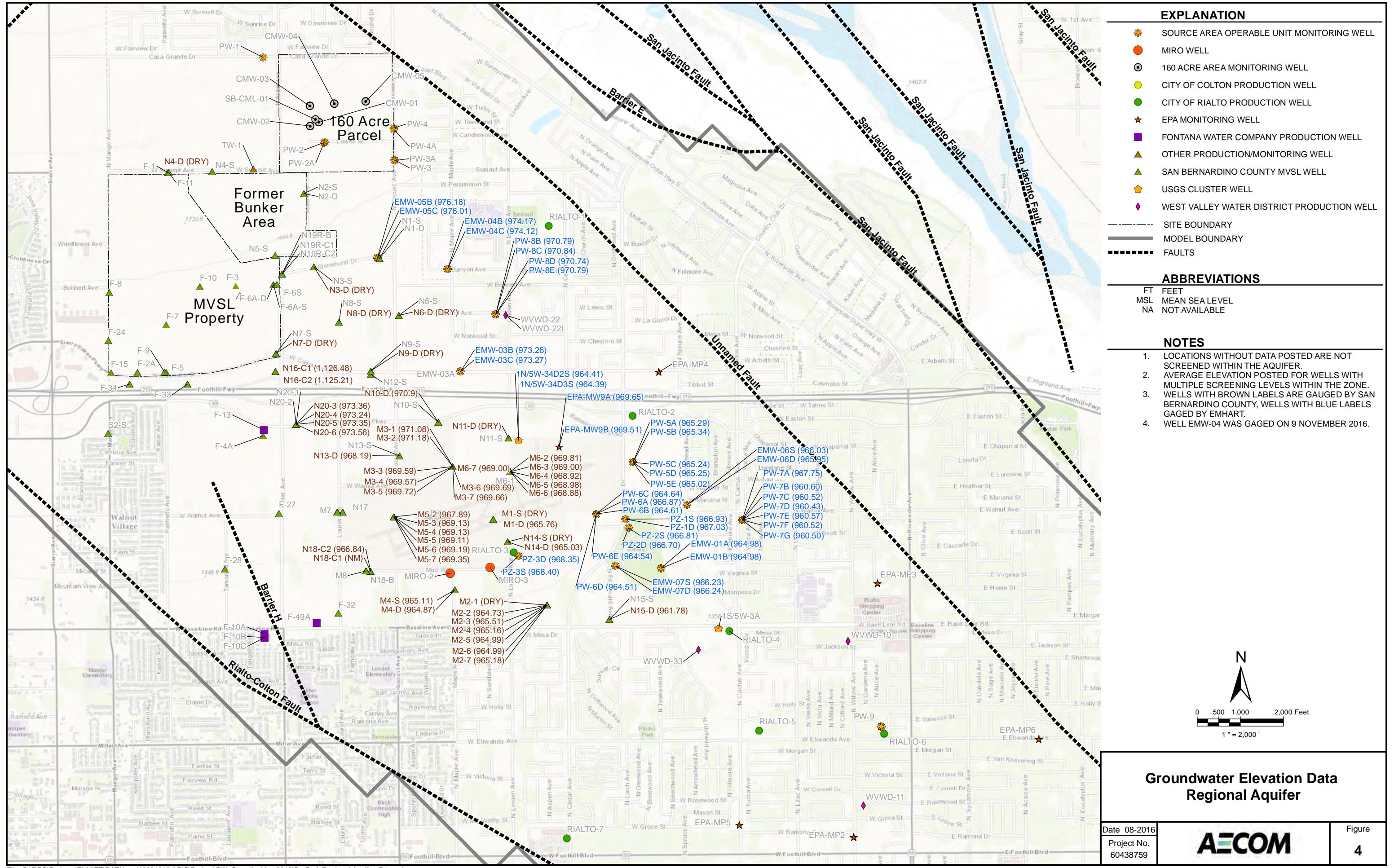
## **Figures**

---

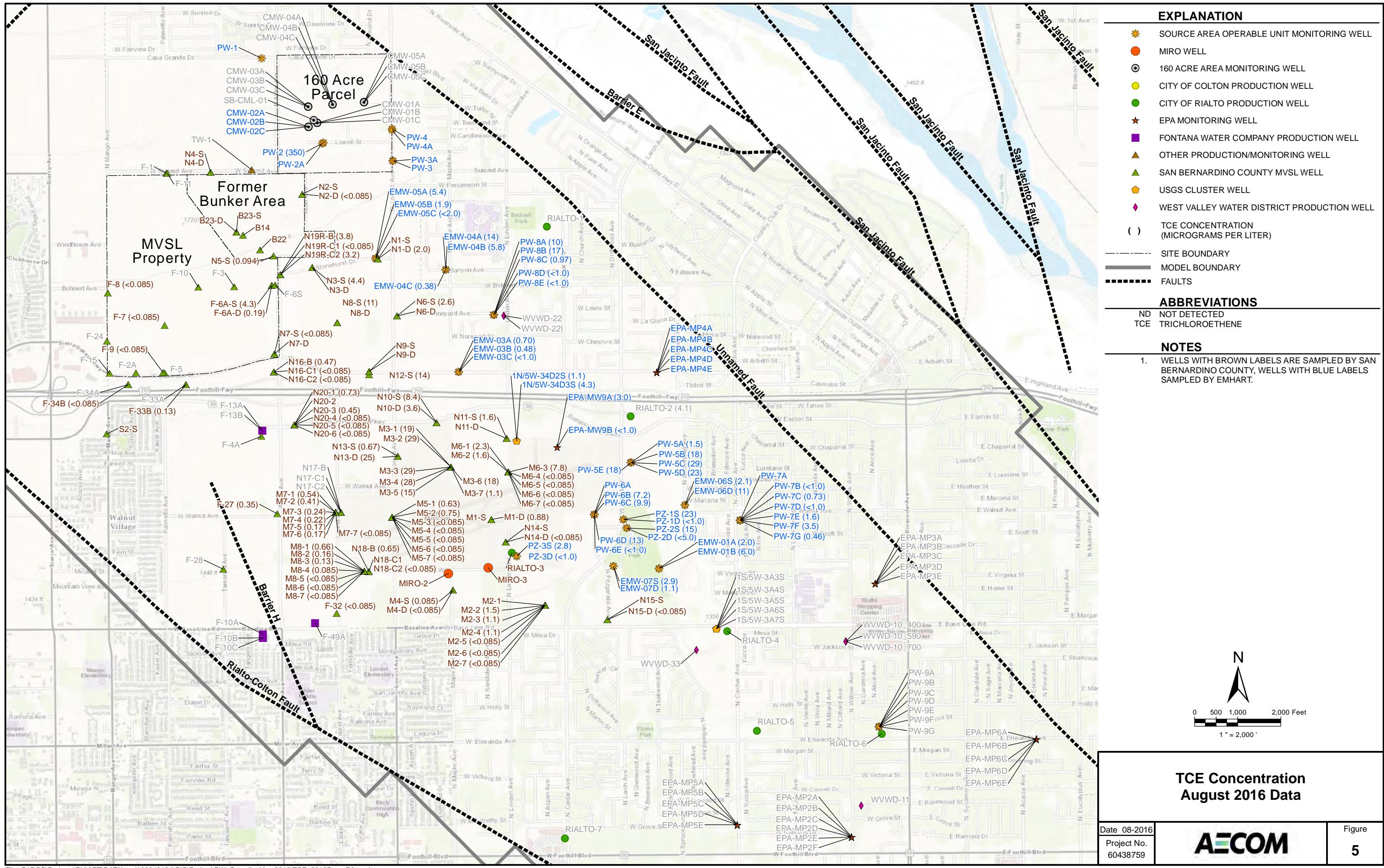


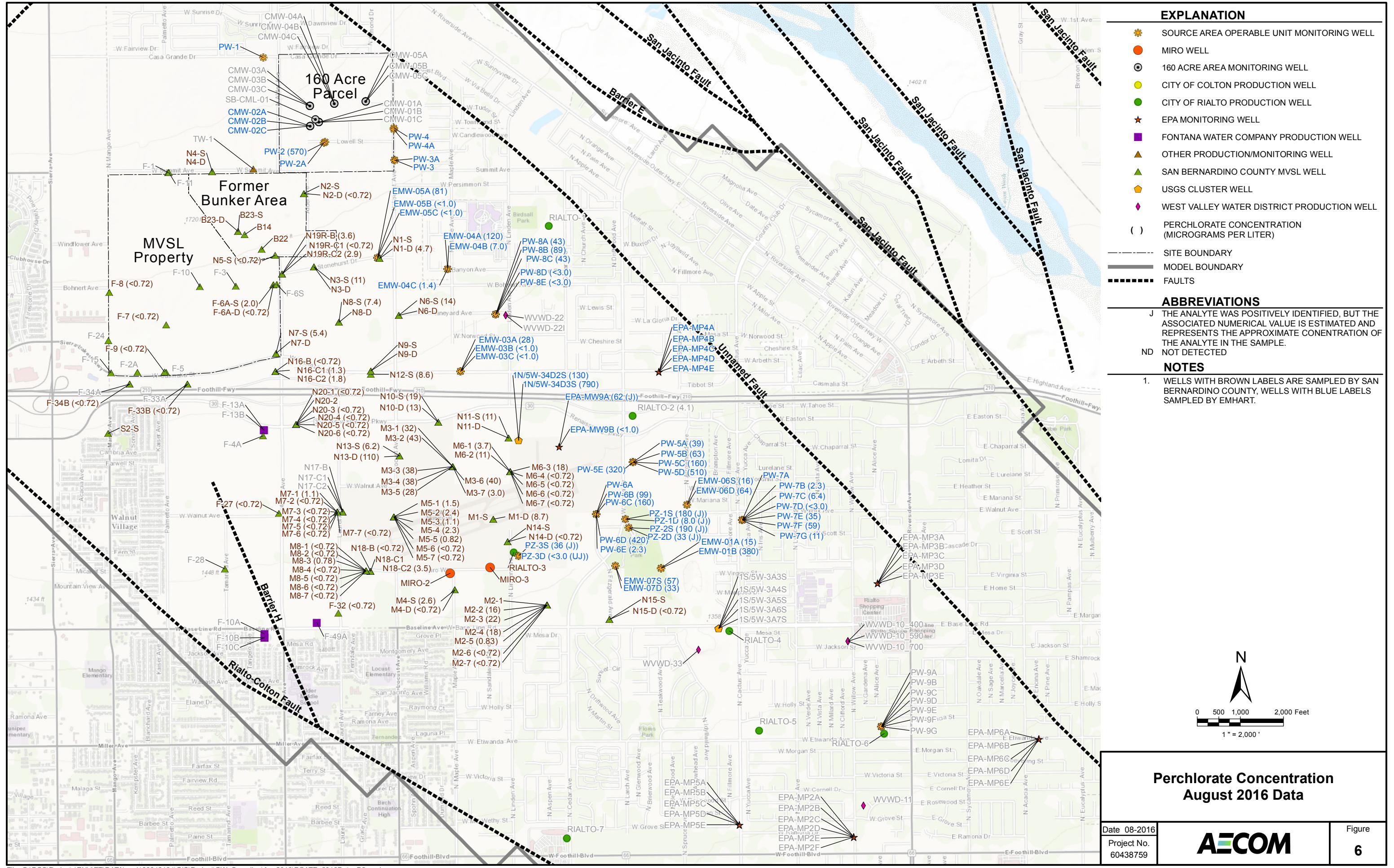






File: Q:\DCS\Projects\ENV\ET\DATA\work\60342184\GIS\Project\GW\_Sampling\Aug2016\PotSurf\_Regional Aquifer\_B1.mxd  
Date: Friday, November 11, 2016 4:20:29 PM





File: Q:\DCS\Projects\ENV\ET\DATA\work\60342184\GIS\Project\GW\_Sampling\Aug2016\PCATE\_2016Data\_B2.mxd  
Date: Thursday, November 17, 2016 8:08:28 AM

## **Appendices**

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**Appendix A**  
**County Data**

---

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-153901-1

Client Project/Site: Rialto

For:

Geo-Logic Associates

2777 East Guasti Road

Suite 1

Ontario, California 91761

Attn: Jason Sapp



Authorized for release by:

8/4/2016 2:52:24 PM

Heather Clark, Project Manager I

[heather.clark@testamericainc.com](mailto:heather.clark@testamericainc.com)

Designee for

Rossina Tomova, Project Manager I

(949)261-1022

[rossina.tomova@testamericainc.com](mailto:rossina.tomova@testamericainc.com)

### LINKS

Review your project  
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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-153901-1	N18-C2 A	Water	07/28/16 12:15	07/28/16 14:10
440-153901-2	N18-C2 B	Water	07/28/16 12:15	07/28/16 14:10

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# Case Narrative

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

## Job ID: 440-153901-1

Laboratory: TestAmerica Irvine

### Narrative

#### Job Narrative 440-153901-1

### Comments

No additional comments.

### Receipt

The samples were received on 7/28/2016 2:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

**Client Sample ID: N18-C2 A**

Date Collected: 07/28/16 12:15

Date Received: 07/28/16 14:10

**Lab Sample ID: 440-153901-1**

Matrix: Water

**Method: 6860 - Perchlorate by IC/MS or IC/MS/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.10	0.053	ug/L			08/03/16 10:50	1

**Client Sample ID: N18-C2 B**

Date Collected: 07/28/16 12:15

Date Received: 07/28/16 14:10

**Lab Sample ID: 440-153901-2**

Matrix: Water

**Method: 6860 - Perchlorate by IC/MS or IC/MS/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.10	0.053	ug/L			08/03/16 11:06	1

## Method Summary

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

Method	Method Description	Protocol	Laboratory
6860	Perchlorate by IC/MS or IC/MS/MS	EPA	TAL IRV

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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# Lab Chronicle

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

**Client Sample ID: N18-C2 A**

Date Collected: 07/28/16 12:15

Date Received: 07/28/16 14:10

**Lab Sample ID: 440-153901-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6860		1			346497	08/03/16 10:50	MN	TAL IRV

**Client Sample ID: N18-C2 B**

Date Collected: 07/28/16 12:15

Date Received: 07/28/16 14:10

**Lab Sample ID: 440-153901-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6860		1			346497	08/03/16 11:06	MN	TAL IRV

## Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# QC Sample Results

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

## Method: 6860 - Perchlorate by IC/MS or IC/MS/MS

**Lab Sample ID: MB 440-346497/5**

**Matrix: Water**

**Analysis Batch: 346497**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.10	0.053	ug/L			08/03/16 08:52	1

**Lab Sample ID: LCS 440-346497/1003**

**Matrix: Water**

**Analysis Batch: 346497**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	2.50	2.49		ug/L		100	80 - 120

**Lab Sample ID: MRL 440-346497/4**

**Matrix: Water**

**Analysis Batch: 346497**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec.	Limits
Perchlorate	0.100	0.0877	J	ug/L		88	50 - 150

**Lab Sample ID: 440-153991-A-3 MS**

**Matrix: Water**

**Analysis Batch: 346497**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	0.69		2.50	3.01		ug/L		93	80 - 120

**Lab Sample ID: 440-153991-A-3 MSD**

**Matrix: Water**

**Analysis Batch: 346497**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Perchlorate	0.69		2.50	3.08		ug/L		96	80 - 120	2	20

# QC Association Summary

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

## LCMS

### Analysis Batch: 346497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-153901-1	N18-C2 A	Total/NA	Water	6860	
440-153901-2	N18-C2 B	Total/NA	Water	6860	
MB 440-346497/5	Method Blank	Total/NA	Water	6860	
LCS 440-346497/1003	Lab Control Sample	Total/NA	Water	6860	
MRL 440-346497/4	Lab Control Sample	Total/NA	Water	6860	
440-153991-A-3 MS	Matrix Spike	Total/NA	Water	6860	
440-153991-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	6860	

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# Definitions/Glossary

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Listed under the "D" column to designate that the result is reported on a dry weight basis
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Certification Summary

Client: Geo-Logic Associates  
Project/Site: Rialto

TestAmerica Job ID: 440-153901-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.

TestAmerica Irvine

TestAmerica Irvine  
17461 Bearan Ave  
Suite 1P  
Irvine, CA 92614  
Phone: 949.261.1022 Fax:

## Chain of Custody Record

069187

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TAL-8210 (07-13)

Client Contact		Project Manager: <u>Season Saggs</u>	Regulatory Program: <input type="checkbox"/> DW <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA <input type="checkbox"/> Other:	Site Contact: <u>Possinga</u>	Date: <u>7-28-16</u>	Carrier: <u>Test America</u>	COC No.: <u>1</u>																		
Company Name: <u>GEOLOGIC ASSOCIATES</u>	Address: <u>27272 E. Cost Rd.</u>	Tel/Fax: <u>(901) - 626 - 1233</u>	Analysis Turnaround Time	<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS	TAT if different from above <u>5 DAYS</u>	<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day	Sampler: <u>A. SHAW</u>																		
City/State/Zip: <u>Brentwood CA 94513</u>	Phone: <u>(901) - 626 - 1222</u>	Fax: <u>(901) - 626 - 1233</u>	Project Name: <u>Vialto Petroleum</u>	Site: <u>R. Vialto</u>	PO # <u>2013.0100</u>	Filterd Sample MS / MSD (Y/N) <u>Perchlorate</u>	For Lab Use Only: <input type="checkbox"/>																		
						Sample Specific Notes: <u>* Samples were collected in field in Hesperia</u>	Walk-in Client: <input type="checkbox"/>																		
							Lab Sampling: <input type="checkbox"/>																		
							Job / SDG No.: <input type="checkbox"/>																		
<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=Grab)</th> <th>Matrix</th> <th># of Cont.</th> </tr> </thead> <tbody> <tr> <td><u>H18-C2 A</u></td> <td><u>7/28/16</u></td> <td><u>12:15</u></td> <td><u>G</u></td> <td><u>Cew</u></td> <td><u>1</u></td> </tr> <tr> <td><u>H18-C2 B</u></td> <td><u>7/28/16</u></td> <td><u>12:15</u></td> <td><u>G</u></td> <td><u>Cew</u></td> <td><u>1</u></td> </tr> </tbody> </table>								Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	<u>H18-C2 A</u>	<u>7/28/16</u>	<u>12:15</u>	<u>G</u>	<u>Cew</u>	<u>1</u>	<u>H18-C2 B</u>	<u>7/28/16</u>	<u>12:15</u>	<u>G</u>	<u>Cew</u>	<u>1</u>
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.																				
<u>H18-C2 A</u>	<u>7/28/16</u>	<u>12:15</u>	<u>G</u>	<u>Cew</u>	<u>1</u>																				
<u>H18-C2 B</u>	<u>7/28/16</u>	<u>12:15</u>	<u>G</u>	<u>Cew</u>	<u>1</u>																				
<p>440-153901 Chain of Custody</p> 																									
<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Disposal by Unknown <input type="checkbox"/> Disposal by <u>Archiver</u> <input type="checkbox"/> Archive for <input type="checkbox"/> Months</p>																									
<p>Preservation Used: 1= Ice, 2= HCl; 3= HNO3; 4=H2SO4; 5=NaOH; 6= Other <u>None</u></p> <p>Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.</p> <p><input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown</p>																									
<p>Special Instructions/QC Requirements &amp; Comments: <u>Note: 5 days turn around - * Samples are field filtered.</u></p>																									
<p><input type="checkbox"/> Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Relinquished by: <u>PC AS</u></p>		<p>Custody Seal No.: <u>1</u></p> <p>Company: <u>GIA</u></p>		<p>Cooler Temp. (°C): <u>Obs'd.</u> <input type="checkbox"/> Corrd.: <u>Therm ID No..</u></p> <p>Received by: <u>John</u></p>		<p>Date/Time: <u>7-28-16 12:50</u></p> <p>Company: <u>TA</u></p>																			
<p><input type="checkbox"/> Relinquished by: <u>PC AS</u></p>		<p>Company: <u>AA</u></p>		<p>Received by: <u>John</u></p>		<p>Date/Time: <u>7-28-16 14:10</u></p> <p>Company: <u>TA</u></p>																			
<p><input type="checkbox"/> Relinquished by: <u>PC AS</u></p>		<p>Company: <u>AA</u></p>		<p>Received in Laboratory by: <u>John</u></p>		<p>Date/Time: <u>7-28-16 14:10</u></p> <p>Company: <u>TA</u></p>																			

1  
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## Login Sample Receipt Checklist

Client: Geo-Logic Associates

Job Number: 440-153901-1

**Login Number: 153901**

**List Source: TestAmerica Irvine**

**List Number: 1**

**Creator: Tisdale, Amanda D**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100/2A  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619000  
Invoice ID: B241488

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## BC Laboratories, Inc.

16-19000

## Report To:

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911

Phone: 209-626-2282

Project: Rialto

Project #: 2013.0100/2A

Samplers Name: A. Shallow

State/CA Zip: 932408

Attn: Ralph Murphy

WO #:

## Chain of Custody

Lab #	Date Sampled	Time Sampled	Matrix	Analysis Requested			
				UV-VIS	IR	GC/MS	EDTA
1	M-1 Shallow (3610038-26)						
2	M-1 Deep (3610038-700)	7-11-16	1325	Cals	*	*	*
3	M-2 Port 1 (3610038-27)						
4	M-2 Port 2 (3610038-28)						
5	M-2 Port 3 (3610038-29)						
6	M-2 Port 4 (3610038-30)						
7	M-2 Port 5 (3610038-31)						
8	M-2 Port 6 (3610038-32)						
9	M-2 Port 7 (3610038-33)						
10							
11							
12							

STORING HOLDING TIME  
C. NO. NO. OF SS  
DC C. SUB (MBAS) CO1  
CHR BY DISTRIBUTION  
TRANSMISSION  
SUB-DUTY

Received By: *J. Hall* Date & Time: *7-12-16 12*  
 Received by: *J. Hall* Date & Time: *7-12-16 1545*  
 Received by: *J. Hall* Date & Time: *7-12-16 1730*

Relinquished by: (Signature) *J. Hall* Received by: (Signature) *J. Hall* Date & Time: *7-12-16 12*  
 Relinquished by: (Signature) *J. Hall* Received by: (Signature) *J. Hall* Date & Time: *7-12-16 1545*  
 Relinquished by: (Signature) *J. Hall* Received by: (Signature) *J. Hall* Date & Time: *7-12-16 1730*

Samples need EDT  
 \*BC Testing to include 1,2,3 TERTIANE  
 -TSA, ETDE and 1,1,2-TCTFA  
 -Metals and Sulfur



## Chain of Custody and Cooler Receipt Form for 1619000 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page <u>1</u> Of <u>1</u>			
Submission #: <u>1619000</u>											
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W</u> <u>S</u>				
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>				Comments: _____							
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input type="checkbox"/> Comments: _____							
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>		Container: <u>PE</u>		Thermometer ID: <u>208</u>		Date/Time <u>ARL 7-12</u>			
		Temperature: (A) <u>0.1</u> °C / (C) <u>0.2</u> °C						Analyst Init <u>ARL 1800</u>			
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
4oz/8oz/16oz PE UNPRES		<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
2oz Cr <sup>6+</sup>		<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>			
QT INORGANIC CHEMICAL METALS		<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>					
INORGANIC CHEMICAL METALS 4oz/8oz/16oz		<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>						
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL		<u>A</u>	<u>B</u>	<u>C</u>							
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: _____											
Sample Numbering Completed By: _____ Date/Time: <u>7/12/16 1825</u> Rev 21 05/23/2016											
A = Actual / C = Corrected											

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1619000-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-1 Deep (3610038-700) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 13:25 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater Metal Analysis: 1-Field Filtered and Acidified	



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619000-01	Client Sample Name: M-1 Deep (3610038-700), 7/11/2016 1:25:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619000-01	Client Sample Name: M-1 Deep (3610038-700), 7/11/2016 1:25:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.88</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619000-01	Client Sample Name: M-1 Deep (3610038-700), 7/11/2016 1:25:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/13/16	07/13/16 13:18	JMS	MS-V14	1	BZG0961

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619000-01	Client Sample Name: M-1 Deep (3610038-700), 7/11/2016 1:25:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	66	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	9.1	mg/L	0.050	0.019	EPA-6010B	ND		1
Dissolved Sodium	13	mg/L	0.50	0.051	EPA-6010B	0.065		1
Dissolved Potassium	3.3	mg/L	1.0	0.10	EPA-6010B	ND		1
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Total Alkalinity as CaCO <sub>3</sub>	170	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	6.5	mg/L	0.50	0.092	EPA-300.0	ND		3
Nitrate as N	7.0	mg/L	0.10	0.022	EPA-300.0	ND		3
Sulfate	14	mg/L	1.0	0.14	EPA-300.0	ND		3
Dissolved Hardness as CaCO <sub>3</sub>	200	mg/L	0.50	0.10	Calc	ND		4
Total Dissolved Solids @ 180 C	290	mg/L	20	20	EPA-160.1	ND		5
MBAS	ND	mg/L	0.20	0.030	EPA-425.1	ND	A07	6
Perchlorate	8.7	ug/L	4.0	0.72	EPA-314.0	ND		7

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/22/16 11:30	JCC	PE-OP3	1	BZG1718
2	EPA-310.1	07/14/16	07/14/16 14:27	RML	MET-1	1	BZG1043
3	EPA-300.0	07/12/16	07/12/16 23:39	JSW	IC5	1	BZG0886
4	Calc	07/13/16	07/26/16 11:37	JKS	Calc	1	BZG0893
5	EPA-160.1	07/15/16	07/15/16 11:00	CAD	MANUAL	2	BZG1233
6	EPA-425.1	07/13/16	07/13/16 09:00	JMN	MANUAL	2	BZG0967
7	EPA-314.0	07/18/16	07/18/16 15:04	JSW	IC6	1	BZG1349

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Ontario, CA 91761

Reported: 07/27/2016 9:13

Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

BCL Sample ID:	1619000-01	Client Sample Name: M-1 Deep (3610038-700), 7/11/2016 1:25:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	200	9.8	EPA-6010B	ND	A07	1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		2
<b>Dissolved Barium</b>	<b>27</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		2
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		2
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		2
<b>Dissolved Chromium</b>	<b>2.9</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		2
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		2
Dissolved Mercury	ND	ug/L	0.20	0.030	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>2.6</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Nickel	ND	ug/L	10	2.4	EPA-6010B	ND		2
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		4
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		2
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		2
Dissolved Vanadium	ND	ug/L	10	2.2	EPA-6010B	ND		2
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-6010B	07/20/16	07/25/16	11:17	JCC	PE-OP3	2	BZG1718
2	EPA-6010B	07/20/16	07/22/16	11:30	JCC	PE-OP3	1	BZG1718
3	EPA-7470A	07/13/16	07/15/16	09:46	MEV	CETAC2	1	BZG0964
4	EPA-6010B	07/20/16	07/25/16	10:20	JCC	PE-OP3	1	BZG1718

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Reported: 07/27/2016 9:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
Benzene	BZG0961-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG0961-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG0961-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
trans-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG0961-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG0961-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG0961-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG0961-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG0961-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG0961-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG0961-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG0961-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG0961-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG0961-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
2-Hexanone	BZG0961-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG0961-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG0961-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG0961-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG0961-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG0961-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG0961-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG0961-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG0961-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG0961-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG0961-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BLK1	92.6	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG0961-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG0961-BLK1	97.5	%	80 - 120 (LCL - UCL)		

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**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0961</b>									
Benzene	BZG0961-BS1	LCS	22.654	25.000	ug/L	90.6	70 - 130		
Bromodichloromethane	BZG0961-BS1	LCS	21.392	25.000	ug/L	85.6	70 - 130		
Chlorobenzene	BZG0961-BS1	LCS	23.094	25.000	ug/L	92.4	70 - 130		
Chloroethane	BZG0961-BS1	LCS	21.507	25.000	ug/L	86.0	70 - 130		
1,4-Dichlorobenzene	BZG0961-BS1	LCS	22.297	25.000	ug/L	89.2	70 - 130		
1,1-Dichloroethane	BZG0961-BS1	LCS	23.496	25.000	ug/L	94.0	70 - 130		
1,1-Dichloroethene	BZG0961-BS1	LCS	22.900	25.000	ug/L	91.6	70 - 130		
Toluene	BZG0961-BS1	LCS	22.288	25.000	ug/L	89.2	70 - 130		
Trichloroethene	BZG0961-BS1	LCS	23.682	25.000	ug/L	94.7	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BS1	LCS	9.8600	10.000	ug/L	98.6	75 - 125		
Toluene-d8 (Surrogate)	BZG0961-BS1	LCS	9.8300	10.000	ug/L	98.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG0961-BS1	LCS	9.7500	10.000	ug/L	97.5	80 - 120		

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0961</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Benzene	MS	1619000-01	ND	26.830	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.463	25.000	ug/L	1.4	106	20	70 - 130
Bromodichloromethane	MS	1619000-01	ND	25.963	25.000	ug/L		104		70 - 130
	MSD	1619000-01	ND	25.020	25.000	ug/L	3.7	100	20	70 - 130
Chlorobenzene	MS	1619000-01	ND	27.564	25.000	ug/L		110		70 - 130
	MSD	1619000-01	ND	26.616	25.000	ug/L	3.5	106	20	70 - 130
Chloroethane	MS	1619000-01	ND	25.630	25.000	ug/L		103		70 - 130
	MSD	1619000-01	ND	24.908	25.000	ug/L	2.9	99.6	20	70 - 130
1,4-Dichlorobenzene	MS	1619000-01	ND	26.699	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.201	25.000	ug/L	1.9	105	20	70 - 130
1,1-Dichloroethane	MS	1619000-01	ND	27.839	25.000	ug/L		111		70 - 130
	MSD	1619000-01	ND	27.556	25.000	ug/L	1.0	110	20	70 - 130
1,1-Dichloroethene	MS	1619000-01	ND	26.916	25.000	ug/L		108		70 - 130
	MSD	1619000-01	ND	26.440	25.000	ug/L	1.8	106	20	70 - 130
Toluene	MS	1619000-01	ND	26.679	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	25.906	25.000	ug/L	2.9	104	20	70 - 130
Trichloroethene	MS	1619000-01	0.88500	27.814	25.000	ug/L		108		70 - 130
	MSD	1619000-01	0.88500	27.305	25.000	ug/L	1.8	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619000-01	ND	10.060	10.000	ug/L		101		75 - 125
	MSD	1619000-01	ND	9.9800	10.000	ug/L	0.8	99.8		75 - 125
Toluene-d8 (Surrogate)	MS	1619000-01	ND	10.020	10.000	ug/L		100		80 - 120
	MSD	1619000-01	ND	9.9000	10.000	ug/L	1.2	99.0		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619000-01	ND	9.7400	10.000	ug/L		97.4		80 - 120
	MSD	1619000-01	ND	9.6900	10.000	ug/L	0.5	96.9		80 - 120

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0886</b>						
Chloride	BZG0886-BLK1	ND	mg/L	0.50	0.092	
Nitrate as N	BZG0886-BLK1	ND	mg/L	0.10	0.022	
Sulfate	BZG0886-BLK1	ND	mg/L	1.0	0.14	
<b>QC Batch ID: BZG0893</b>						
Dissolved Hardness as CaCO <sub>3</sub>	BZG0893-BLK1	ND	mg/L	0.50	0.10	
<b>QC Batch ID: BZG0967</b>						
MBAS	BZG0967-BLK1	ND	mg/L	0.10	0.015	
<b>QC Batch ID: BZG1043</b>						
Hydroxide	BZG1043-BLK1	ND	mg/L	1.4	1.4	
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BLK1	ND	mg/L	4.1	4.1	
<b>QC Batch ID: BZG1233</b>						
Total Dissolved Solids @ 180 C	BZG1233-BLK1	ND	mg/L	6.7	6.7	
<b>QC Batch ID: BZG1349</b>						
Perchlorate	BZG1349-BLK1	ND	ug/L	4.0	0.72	
<b>QC Batch ID: BZG1718</b>						
Dissolved Calcium	BZG1718-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BZG1718-BLK1	ND	mg/L	0.050	0.019	
<b>Dissolved Sodium</b>	<b>BZG1718-BLK1</b>	<b>0.064942</b>	<b>mg/L</b>	<b>0.50</b>	<b>0.051</b>	<b>J</b>
Dissolved Potassium	BZG1718-BLK1	ND	mg/L	1.0	0.10	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0886</b>									
Chloride	BZG0886-BS1	LCS	52.434	50.000	mg/L	105		90 - 110	
Nitrate as N	BZG0886-BS1	LCS	5.1670	5.0000	mg/L	103		90 - 110	
Sulfate	BZG0886-BS1	LCS	103.97	100.00	mg/L	104		90 - 110	
<b>QC Batch ID: BZG0967</b>									
MBAS	BZG0967-BS1	LCS	0.20560	0.20000	mg/L	103		85 - 115	
<b>QC Batch ID: BZG1043</b>									
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BS3	LCS	105.12	100.00	mg/L	105		90 - 110	
<b>QC Batch ID: BZG1233</b>									
Total Dissolved Solids @ 180 C	BZG1233-BS1	LCS	575.00	586.00	mg/L	98.1		90 - 110	
<b>QC Batch ID: BZG1349</b>									
Perchlorate	BZG1349-BS1	LCS	8.9030	10.000	ug/L	89.0		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Calcium	BZG1718-BS1	LCS	11.040	10.000	mg/L	110		85 - 115	
Dissolved Magnesium	BZG1718-BS1	LCS	10.243	10.000	mg/L	102		85 - 115	
Dissolved Sodium	BZG1718-BS1	LCS	10.763	10.000	mg/L	108		85 - 115	
Dissolved Potassium	BZG1718-BS1	LCS	10.315	10.000	mg/L	103		85 - 115	

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0886</b>		Used client sample: Y - Description: N15-4, 07/11/2016 16:05								
Chloride	DUP	1619003-01	3.3100	3.2630		mg/L	1.4		10	
	MS	1619003-01	3.3100	53.288	50.505	mg/L		99.0		80 - 120
	MSD	1619003-01	3.3100	53.012	50.505	mg/L	0.5	98.4	10	80 - 120
Nitrate as N	DUP	1619003-01	1.3180	1.3000		mg/L	1.4		10	
	MS	1619003-01	1.3180	6.1172	5.0505	mg/L		95.0		80 - 120
	MSD	1619003-01	1.3180	6.1020	5.0505	mg/L	0.2	94.7	10	80 - 120
Sulfate	DUP	1619003-01	13.686	13.462		mg/L	1.7		10	
	MS	1619003-01	13.686	113.24	101.01	mg/L		98.6		80 - 120
	MSD	1619003-01	13.686	113.07	101.01	mg/L	0.1	98.4	10	80 - 120
<b>QC Batch ID: BZG0967</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
MBAS	DUP	1619000-01	ND	ND		mg/L			20	
	MS	1619000-01	ND	0.41640	0.40000	mg/L		104		80 - 120
	MSD	1619000-01	ND	0.42660	0.40000	mg/L	2.4	107	20	80 - 120
<b>QC Batch ID: BZG1043</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Hydroxide	DUP	1619000-01	ND	ND		mg/L			10	
Total Alkalinity as CaCO3	DUP	1619000-01	166.59	164.00		mg/L	1.6		10	
<b>QC Batch ID: BZG1233</b>		Used client sample: N								
Total Dissolved Solids @ 180 C	DUP	1618778-06	505.00	495.00		mg/L	2.0		10	
<b>QC Batch ID: BZG1349</b>		Used client sample: N								
Perchlorate	DUP	1618848-04	0.93990	0.92680		ug/L	1.4		15	J
	MS	1618848-04	0.93990	10.147	10.101	ug/L		91.2		80 - 120
	MSD	1618848-04	0.93990	9.8860	10.101	ug/L	2.6	88.6	15	80 - 120
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Calcium	DUP	1619000-01	66.062	64.528		mg/L	2.3		20	
	MS	1619000-01	66.062	72.914	10.204	mg/L		67.1		75 - 125 A03
	MSD	1619000-01	66.062	72.796	10.204	mg/L	0.2	66.0	20	75 - 125 A03
Dissolved Magnesium	DUP	1619000-01	9.1115	9.2802		mg/L	1.8		20	
	MS	1619000-01	9.1115	19.300	10.204	mg/L		99.8		75 - 125
	MSD	1619000-01	9.1115	18.724	10.204	mg/L	3.0	94.2	20	75 - 125
Dissolved Sodium	DUP	1619000-01	13.160	13.094		mg/L	0.5		20	
	MS	1619000-01	13.160	23.401	10.204	mg/L		100		75 - 125
	MSD	1619000-01	13.160	22.818	10.204	mg/L	2.5	94.6	20	75 - 125
Dissolved Potassium	DUP	1619000-01	3.2973	3.3530		mg/L	1.7		20	
	MS	1619000-01	3.2973	13.671	10.204	mg/L		102		75 - 125
	MSD	1619000-01	3.2973	13.012	10.204	mg/L	4.9	95.2	20	75 - 125

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0964</b>						
Dissolved Mercury	BZG0964-BLK1	ND	ug/L	0.20	0.030	
<b>QC Batch ID: BZG1718</b>						
Dissolved Antimony	BZG1718-BLK3	ND	ug/L	100	4.9	
Dissolved Arsenic	BZG1718-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BZG1718-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BZG1718-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BZG1718-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BZG1718-BLK1	ND	ug/L	50	1.1	
Dissolved Copper	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Lead	BZG1718-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BZG1718-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BZG1718-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BZG1718-BLK2	ND	ug/L	100	15	
Dissolved Silver	BZG1718-BLK1	ND	ug/L	10	1.2	
Dissolved Thallium	BZG1718-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BZG1718-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BZG1718-BLK1	ND	ug/L	10	5.0	

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:13

Project: Rialto Perchlorate - EDT

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0964</b>									
Dissolved Mercury	BZG0964-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Antimony	BZG1718-BS3	LCS	392.92	400.00	ug/L	98.2		85 - 115	
Dissolved Arsenic	BZG1718-BS1	LCS	191.58	200.00	ug/L	95.8		85 - 115	
Dissolved Barium	BZG1718-BS1	LCS	426.39	400.00	ug/L	107		85 - 115	
Dissolved Beryllium	BZG1718-BS1	LCS	196.37	200.00	ug/L	98.2		85 - 115	
Dissolved Cadmium	BZG1718-BS1	LCS	190.60	200.00	ug/L	95.3		85 - 115	
Dissolved Chromium	BZG1718-BS1	LCS	202.76	200.00	ug/L	101		85 - 115	
Dissolved Cobalt	BZG1718-BS1	LCS	212.53	200.00	ug/L	106		85 - 115	
Dissolved Copper	BZG1718-BS1	LCS	407.78	400.00	ug/L	102		85 - 115	
Dissolved Lead	BZG1718-BS1	LCS	433.22	400.00	ug/L	108		85 - 115	
Dissolved Molybdenum	BZG1718-BS1	LCS	219.69	200.00	ug/L	110		85 - 115	
Dissolved Nickel	BZG1718-BS1	LCS	417.27	400.00	ug/L	104		85 - 115	
Dissolved Selenium	BZG1718-BS2	LCS	190.81	200.00	ug/L	95.4		85 - 115	
Dissolved Silver	BZG1718-BS1	LCS	96.982	100.00	ug/L	97.0		85 - 115	
Dissolved Thallium	BZG1718-BS1	LCS	452.28	400.00	ug/L	113		85 - 115	
Dissolved Vanadium	BZG1718-BS1	LCS	210.65	200.00	ug/L	105		85 - 115	
Dissolved Zinc	BZG1718-BS1	LCS	467.11	500.00	ug/L	93.4		85 - 115	

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0964</b>		Used client sample: N								
Dissolved Mercury	DUP	1618920-01	ND	0.032500		ug/L		20		J
	MS	1618920-01	ND	0.96750	1.0000	ug/L		96.8	70 - 130	
	MSD	1618920-01	ND	0.97500	1.0000	ug/L	0.8	97.5	20	70 - 130
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Antimony	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	683.99	816.33	ug/L		83.8	75 - 125	
	MSD	1619000-01	ND	683.57	816.33	ug/L	0.1	83.7	20	75 - 125
Dissolved Arsenic	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	192.74	204.08	ug/L		94.4	75 - 125	
	MSD	1619000-01	ND	193.05	204.08	ug/L	0.2	94.6	20	75 - 125
Dissolved Barium	DUP	1619000-01	27.007	28.392		ug/L	5.0	20		
	MS	1619000-01	27.007	464.00	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	27.007	452.87	408.16	ug/L	2.4	104	20	75 - 125
Dissolved Beryllium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	207.46	204.08	ug/L		102	75 - 125	
	MSD	1619000-01	ND	202.14	204.08	ug/L	2.6	99.0	20	75 - 125
Dissolved Cadmium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	214.64	204.08	ug/L		105	75 - 125	
	MSD	1619000-01	ND	208.71	204.08	ug/L	2.8	102	20	75 - 125
Dissolved Chromium	DUP	1619000-01	2.8866	2.5637		ug/L	11.8	20		J
	MS	1619000-01	2.8866	206.10	204.08	ug/L		99.6	75 - 125	
	MSD	1619000-01	2.8866	201.87	204.08	ug/L	2.1	97.5	20	75 - 125
Dissolved Cobalt	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	210.09	204.08	ug/L		103	75 - 125	
	MSD	1619000-01	ND	204.75	204.08	ug/L	2.6	100	20	75 - 125
Dissolved Copper	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	393.85	408.16	ug/L		96.5	75 - 125	
	MSD	1619000-01	ND	394.42	408.16	ug/L	0.1	96.6	20	75 - 125
Dissolved Lead	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	438.45	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	ND	424.70	408.16	ug/L	3.2	104	20	75 - 125
Dissolved Molybdenum	DUP	1619000-01	2.6371	2.6599		ug/L	0.9	20		J
	MS	1619000-01	2.6371	204.69	204.08	ug/L		99.0	75 - 125	
	MSD	1619000-01	2.6371	202.27	204.08	ug/L	1.2	97.8	20	75 - 125
Dissolved Nickel	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	415.15	408.16	ug/L		102	75 - 125	
	MSD	1619000-01	ND	410.58	408.16	ug/L	1.1	101	20	75 - 125

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Selenium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	247.94	204.08	ug/L		121		75 - 125
	MSD	1619000-01	ND	246.47	204.08	ug/L	0.6	121	20	75 - 125
Dissolved Silver	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	97.719	102.04	ug/L		95.8		75 - 125
	MSD	1619000-01	ND	96.062	102.04	ug/L	1.7	94.1	20	75 - 125
Dissolved Thallium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	465.08	408.16	ug/L		114		75 - 125
	MSD	1619000-01	ND	451.43	408.16	ug/L	3.0	111	20	75 - 125
Dissolved Vanadium	DUP	1619000-01	ND	2.3483		ug/L			20	J
	MS	1619000-01	ND	212.18	204.08	ug/L		104		75 - 125
	MSD	1619000-01	ND	207.85	204.08	ug/L	2.1	102	20	75 - 125
Dissolved Zinc	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	509.68	510.20	ug/L		99.9		75 - 125
	MSD	1619000-01	ND	493.49	510.20	ug/L	3.2	96.7	20	75 - 125

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**Reported:** 07/27/2016 9:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100/2A  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619001  
Invoice ID: B241489

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody and Cooler Receipt Form for 1619001 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page <u>1</u> Of <u>1</u>			
Submission #: <u>1619001</u>										
SHIPPING INFORMATION						SHIPPING CONTAINER		FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>			
BC Lab Field Service <input type="checkbox"/>				Other <input type="checkbox"/> (Specify) _____		Other <input type="checkbox"/> (Specify) _____	<u>W</u> <u>S</u>			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	None <input type="checkbox"/> Comments: _____						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>	Container: <u>PE</u>	Thermometer ID: <u>208</u>		Date/Time <u>ARL 7-12</u>				
		Temperature: (A) <u>0.1</u> °C / (C) <u>0.2</u> °C			Analyst Init <u>ARL 1800</u>					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	<u>1</u>	<u>1</u>								
4oz / 8oz / 16oz PE UNPRES	<u>2</u>	<u>2</u>								
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	<u>F</u>	<u>F</u>								
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	<u>AFC</u>	<u>AFC</u>								
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: _____										
Sample Numbering Completed By: _____	Date/Time: <u>7/17/16 1825</u> Rev 21 05/23/2016									
<u>M</u>	I = Actual / C = Corrected									
I:\WPDec\WordPerfect\LAB_DOCS\FORMS\ISAMRECRev 20										

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619001-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-4 Shallow (3610038-041) <b>Sampled By:</b> Adam Shaw	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 10:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater Metal Analysis: 1-Field Filtered and Acidified		
1619001-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-4 Deep (3610038-703) <b>Sampled By:</b> Adam Shaw	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 11:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater Metal Analysis: 1-Field Filtered and Acidified		

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-01	Client Sample Name: M-4 Shallow (3610038-041), 7/11/2016 10:10:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-01	Client Sample Name: M-4 Shallow (3610038-041), 7/11/2016 10:10:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.085</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-01	Client Sample Name: M-4 Shallow (3610038-041), 7/11/2016 10:10:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/13/16	07/13/16 13:40	JMS	MS-V14	1	BZG0961

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619001-01	Client Sample Name: M-4 Shallow (3610038-041), 7/11/2016 10:10:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	67	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	8.1	mg/L	0.050	0.019	EPA-6010B	ND		1
Dissolved Sodium	11	mg/L	0.50	0.051	EPA-6010B	0.065		1
Dissolved Potassium	2.8	mg/L	1.0	0.10	EPA-6010B	ND		1
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Total Alkalinity as CaCO <sub>3</sub>	160	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	6.9	mg/L	0.50	0.092	EPA-300.0	ND		3
Nitrate as N	5.4	mg/L	0.10	0.022	EPA-300.0	ND		3
Sulfate	15	mg/L	1.0	0.14	EPA-300.0	ND		3
Dissolved Hardness as CaCO <sub>3</sub>	200	mg/L	0.50	0.10	Calc	ND		4
Total Dissolved Solids @ 180 C	250	mg/L	20	20	EPA-160.1	ND		5
MBAS	ND	mg/L	0.10	0.015	EPA-425.1	ND		6
Perchlorate	2.6	ug/L	4.0	0.72	EPA-314.0	ND	J	7

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	07/20/16	07/22/16 11:39	JCC	PE-OP3	1	BZG1718
2	EPA-310.1	07/14/16	07/14/16 14:39	RML	MET-1	1	BZG1043
3	EPA-300.0	07/12/16	07/12/16 23:06	JSW	IC5	1	BZG0886
4	Calc	07/13/16	07/26/16 10:12	MSA	Calc	1	BZG0894
5	EPA-160.1	07/15/16	07/15/16 11:00	CAD	MANUAL	2	BZG1233
6	EPA-425.1	07/13/16	07/13/16 09:00	JMN	MANUAL	1	BZG0967
7	EPA-314.0	07/18/16	07/18/16 15:18	JSW	IC6	1	BZG1349

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Reported: 07/27/2016 9:14

Project: Rialto Perchlorate - EDT

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Metals Analysis

BCL Sample ID:	1619001-01	Client Sample Name: M-4 Shallow (3610038-041), 7/11/2016 10:10:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	200	9.8	EPA-6010B	ND	A07	1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		2
<b>Dissolved Barium</b>	<b>33</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		2
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		2
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		2
<b>Dissolved Chromium</b>	<b>1.6</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		2
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		2
Dissolved Mercury	ND	ug/L	0.20	0.030	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>1.9</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Nickel	ND	ug/L	10	2.4	EPA-6010B	ND		2
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		4
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		2
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		2
<b>Dissolved Vanadium</b>	<b>3.2</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/25/16 11:25	JCC	PE-OP3	2	BZG1718
2	EPA-6010B	07/20/16	07/22/16 11:39	JCC	PE-OP3	1	BZG1718
3	EPA-7470A	07/13/16	07/15/16 09:48	MEV	CETAC2	1	BZG0964
4	EPA-6010B	07/20/16	07/25/16 10:31	JCC	PE-OP3	1	BZG1718

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-02	Client Sample Name: M-4 Deep (3610038-703), 7/11/2016 11:45:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-02	Client Sample Name: M-4 Deep (3610038-703), 7/11/2016 11:45:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619001-02	Client Sample Name: M-4 Deep (3610038-703), 7/11/2016 11:45:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/13/16	07/13/16 14:03	JMS	MS-V14	1	BZG0961

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619001-02	Client Sample Name: M-4 Deep (3610038-703), 7/11/2016 11:45:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	60	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	5.1	mg/L	0.050	0.019	EPA-6010B	ND		1
Dissolved Sodium	11	mg/L	0.50	0.051	EPA-6010B	0.065		1
Dissolved Potassium	2.4	mg/L	1.0	0.10	EPA-6010B	ND		1
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Total Alkalinity as CaCO <sub>3</sub>	150	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	3.6	mg/L	0.50	0.092	EPA-300.0	ND		3
Nitrate as N	2.2	mg/L	0.10	0.022	EPA-300.0	ND		3
Sulfate	15	mg/L	1.0	0.14	EPA-300.0	ND		3
Dissolved Hardness as CaCO <sub>3</sub>	170	mg/L	0.50	0.10	Calc	ND		4
Total Dissolved Solids @ 180 C	220	mg/L	20	20	EPA-160.1	ND		5
MBAS	ND	mg/L	0.10	0.015	EPA-425.1	ND		6
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		7

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/22/16 11:40	JCC	PE-OP3	1	BZG1718
2	EPA-310.1	07/14/16	07/14/16 14:45	RML	MET-1	1	BZG1043
3	EPA-300.0	07/12/16	07/12/16 23:22	JSW	IC5	1	BZG0886
4	Calc	07/13/16	07/26/16 10:13	MSA	Calc	1	BZG0894
5	EPA-160.1	07/15/16	07/15/16 11:00	CAD	MANUAL	2	BZG1233
6	EPA-425.1	07/13/16	07/13/16 09:00	JMN	MANUAL	1	BZG0967
7	EPA-314.0	07/18/16	07/18/16 15:32	JSW	IC6	1	BZG1349

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Ontario, CA 91761

Reported: 07/27/2016 9:14

Project: Rialto Perchlorate - EDT

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Metals Analysis

BCL Sample ID:	1619001-02	Client Sample Name: M-4 Deep (3610038-703), 7/11/2016 11:45:00AM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	200	9.8	EPA-6010B	ND	A07	1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		2
<b>Dissolved Barium</b>	<b>23</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		2
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		2
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		2
<b>Dissolved Chromium</b>	<b>1.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		2
<b>Dissolved Copper</b>	<b>1.0</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		2
<b>Dissolved Mercury</b>	<b>0.030</b>	<b>ug/L</b>	<b>0.20</b>	<b>0.030</b>	<b>EPA-7470A</b>	ND	<b>J</b>	3
<b>Dissolved Molybdenum</b>	<b>2.2</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Nickel	ND	ug/L	10	2.4	EPA-6010B	ND		2
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		4
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		2
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		2
<b>Dissolved Vanadium</b>	<b>4.6</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/25/16 11:28	JCC	PE-OP3	2	BZG1718
2	EPA-6010B	07/20/16	07/22/16 11:40	JCC	PE-OP3	1	BZG1718
3	EPA-7470A	07/13/16	07/15/16 09:50	MEV	CETAC2	1	BZG0964
4	EPA-6010B	07/20/16	07/25/16 10:42	JCC	PE-OP3	1	BZG1718

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Reported: 07/27/2016 9:14  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
Benzene	BZG0961-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG0961-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG0961-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
trans-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG0961-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG0961-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG0961-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG0961-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG0961-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG0961-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG0961-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG0961-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG0961-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG0961-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
2-Hexanone	BZG0961-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG0961-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG0961-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG0961-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG0961-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG0961-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG0961-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG0961-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG0961-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG0961-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG0961-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BLK1	92.6	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG0961-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG0961-BLK1	97.5	%	80 - 120 (LCL - UCL)		

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**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0961</b>									
Benzene	BZG0961-BS1	LCS	22.654	25.000	ug/L	90.6	70 - 130		
Bromodichloromethane	BZG0961-BS1	LCS	21.392	25.000	ug/L	85.6	70 - 130		
Chlorobenzene	BZG0961-BS1	LCS	23.094	25.000	ug/L	92.4	70 - 130		
Chloroethane	BZG0961-BS1	LCS	21.507	25.000	ug/L	86.0	70 - 130		
1,4-Dichlorobenzene	BZG0961-BS1	LCS	22.297	25.000	ug/L	89.2	70 - 130		
1,1-Dichloroethane	BZG0961-BS1	LCS	23.496	25.000	ug/L	94.0	70 - 130		
1,1-Dichloroethene	BZG0961-BS1	LCS	22.900	25.000	ug/L	91.6	70 - 130		
Toluene	BZG0961-BS1	LCS	22.288	25.000	ug/L	89.2	70 - 130		
Trichloroethene	BZG0961-BS1	LCS	23.682	25.000	ug/L	94.7	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BS1	LCS	9.8600	10.000	ug/L	98.6	75 - 125		
Toluene-d8 (Surrogate)	BZG0961-BS1	LCS	9.8300	10.000	ug/L	98.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG0961-BS1	LCS	9.7500	10.000	ug/L	97.5	80 - 120		

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Ontario, CA 91761

Reported: 07/27/2016 9:14  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0961</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Benzene	MS	1619000-01	ND	26.830	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.463	25.000	ug/L	1.4	106	20	70 - 130
Bromodichloromethane	MS	1619000-01	ND	25.963	25.000	ug/L		104		70 - 130
	MSD	1619000-01	ND	25.020	25.000	ug/L	3.7	100	20	70 - 130
Chlorobenzene	MS	1619000-01	ND	27.564	25.000	ug/L		110		70 - 130
	MSD	1619000-01	ND	26.616	25.000	ug/L	3.5	106	20	70 - 130
Chloroethane	MS	1619000-01	ND	25.630	25.000	ug/L		103		70 - 130
	MSD	1619000-01	ND	24.908	25.000	ug/L	2.9	99.6	20	70 - 130
1,4-Dichlorobenzene	MS	1619000-01	ND	26.699	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.201	25.000	ug/L	1.9	105	20	70 - 130
1,1-Dichloroethane	MS	1619000-01	ND	27.839	25.000	ug/L		111		70 - 130
	MSD	1619000-01	ND	27.556	25.000	ug/L	1.0	110	20	70 - 130
1,1-Dichloroethene	MS	1619000-01	ND	26.916	25.000	ug/L		108		70 - 130
	MSD	1619000-01	ND	26.440	25.000	ug/L	1.8	106	20	70 - 130
Toluene	MS	1619000-01	ND	26.679	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	25.906	25.000	ug/L	2.9	104	20	70 - 130
Trichloroethene	MS	1619000-01	0.88500	27.814	25.000	ug/L		108		70 - 130
	MSD	1619000-01	0.88500	27.305	25.000	ug/L	1.8	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619000-01	ND	10.060	10.000	ug/L		101		75 - 125
	MSD	1619000-01	ND	9.9800	10.000	ug/L	0.8	99.8		75 - 125
Toluene-d8 (Surrogate)	MS	1619000-01	ND	10.020	10.000	ug/L		100		80 - 120
	MSD	1619000-01	ND	9.9000	10.000	ug/L	1.2	99.0		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619000-01	ND	9.7400	10.000	ug/L		97.4		80 - 120
	MSD	1619000-01	ND	9.6900	10.000	ug/L	0.5	96.9		80 - 120

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**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0886</b>						
Chloride	BZG0886-BLK1	ND	mg/L	0.50	0.092	
Nitrate as N	BZG0886-BLK1	ND	mg/L	0.10	0.022	
Sulfate	BZG0886-BLK1	ND	mg/L	1.0	0.14	
<b>QC Batch ID: BZG0894</b>						
Dissolved Hardness as CaCO <sub>3</sub>	BZG0894-BLK1	ND	mg/L	0.50	0.10	
<b>QC Batch ID: BZG0967</b>						
MBAS	BZG0967-BLK1	ND	mg/L	0.10	0.015	
<b>QC Batch ID: BZG1043</b>						
Hydroxide	BZG1043-BLK1	ND	mg/L	1.4	1.4	
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BLK1	ND	mg/L	4.1	4.1	
<b>QC Batch ID: BZG1233</b>						
Total Dissolved Solids @ 180 C	BZG1233-BLK1	ND	mg/L	6.7	6.7	
<b>QC Batch ID: BZG1349</b>						
Perchlorate	BZG1349-BLK1	ND	ug/L	4.0	0.72	
<b>QC Batch ID: BZG1718</b>						
Dissolved Calcium	BZG1718-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BZG1718-BLK1	ND	mg/L	0.050	0.019	
<b>Dissolved Sodium</b>	<b>BZG1718-BLK1</b>	<b>0.064942</b>	<b>mg/L</b>	<b>0.50</b>	<b>0.051</b>	<b>J</b>
Dissolved Potassium	BZG1718-BLK1	ND	mg/L	1.0	0.10	

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Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0886</b>									
Chloride	BZG0886-BS1	LCS	52.434	50.000	mg/L	105		90 - 110	
Nitrate as N	BZG0886-BS1	LCS	5.1670	5.0000	mg/L	103		90 - 110	
Sulfate	BZG0886-BS1	LCS	103.97	100.00	mg/L	104		90 - 110	
<b>QC Batch ID: BZG0967</b>									
MBAS	BZG0967-BS1	LCS	0.20560	0.20000	mg/L	103		85 - 115	
<b>QC Batch ID: BZG1043</b>									
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BS3	LCS	105.12	100.00	mg/L	105		90 - 110	
<b>QC Batch ID: BZG1233</b>									
Total Dissolved Solids @ 180 C	BZG1233-BS1	LCS	575.00	586.00	mg/L	98.1		90 - 110	
<b>QC Batch ID: BZG1349</b>									
Perchlorate	BZG1349-BS1	LCS	8.9030	10.000	ug/L	89.0		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Calcium	BZG1718-BS1	LCS	11.040	10.000	mg/L	110		85 - 115	
Dissolved Magnesium	BZG1718-BS1	LCS	10.243	10.000	mg/L	102		85 - 115	
Dissolved Sodium	BZG1718-BS1	LCS	10.763	10.000	mg/L	108		85 - 115	
Dissolved Potassium	BZG1718-BS1	LCS	10.315	10.000	mg/L	103		85 - 115	

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Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0886</b>		Used client sample: Y - Description: N15-4, 07/11/2016 16:05								
Chloride	DUP	1619003-01	3.3100	3.2630		mg/L	1.4		10	
	MS	1619003-01	3.3100	53.288	50.505	mg/L		99.0		80 - 120
	MSD	1619003-01	3.3100	53.012	50.505	mg/L	0.5	98.4	10	80 - 120
Nitrate as N	DUP	1619003-01	1.3180	1.3000		mg/L	1.4		10	
	MS	1619003-01	1.3180	6.1172	5.0505	mg/L		95.0		80 - 120
	MSD	1619003-01	1.3180	6.1020	5.0505	mg/L	0.2	94.7	10	80 - 120
Sulfate	DUP	1619003-01	13.686	13.462		mg/L	1.7		10	
	MS	1619003-01	13.686	113.24	101.01	mg/L		98.6		80 - 120
	MSD	1619003-01	13.686	113.07	101.01	mg/L	0.1	98.4	10	80 - 120
<b>QC Batch ID: BZG0967</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
MBAS	DUP	1619000-01	ND	ND		mg/L			20	
	MS	1619000-01	ND	0.41640	0.40000	mg/L		104		80 - 120
	MSD	1619000-01	ND	0.42660	0.40000	mg/L	2.4	107	20	80 - 120
<b>QC Batch ID: BZG1043</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Hydroxide	DUP	1619000-01	ND	ND		mg/L			10	
Total Alkalinity as CaCO3	DUP	1619000-01	166.59	164.00		mg/L	1.6		10	
<b>QC Batch ID: BZG1233</b>		Used client sample: N								
Total Dissolved Solids @ 180 C	DUP	1618778-06	505.00	495.00		mg/L	2.0		10	
<b>QC Batch ID: BZG1349</b>		Used client sample: N								
Perchlorate	DUP	1618848-04	0.93990	0.92680		ug/L	1.4		15	J
	MS	1618848-04	0.93990	10.147	10.101	ug/L		91.2		80 - 120
	MSD	1618848-04	0.93990	9.8860	10.101	ug/L	2.6	88.6	15	80 - 120
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Calcium	DUP	1619000-01	66.062	64.528		mg/L	2.3		20	
	MS	1619000-01	66.062	72.914	10.204	mg/L		67.1		75 - 125
	MSD	1619000-01	66.062	72.796	10.204	mg/L	0.2	66.0	20	75 - 125
Dissolved Magnesium	DUP	1619000-01	9.1115	9.2802		mg/L	1.8		20	
	MS	1619000-01	9.1115	19.300	10.204	mg/L		99.8		75 - 125
	MSD	1619000-01	9.1115	18.724	10.204	mg/L	3.0	94.2	20	75 - 125
Dissolved Sodium	DUP	1619000-01	13.160	13.094		mg/L	0.5		20	
	MS	1619000-01	13.160	23.401	10.204	mg/L		100		75 - 125
	MSD	1619000-01	13.160	22.818	10.204	mg/L	2.5	94.6	20	75 - 125
Dissolved Potassium	DUP	1619000-01	3.2973	3.3530		mg/L	1.7		20	
	MS	1619000-01	3.2973	13.671	10.204	mg/L		102		75 - 125
	MSD	1619000-01	3.2973	13.012	10.204	mg/L	4.9	95.2	20	75 - 125

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**Reported:** 07/27/2016 9:14  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0964</b>						
Dissolved Mercury	BZG0964-BLK1	ND	ug/L	0.20	0.030	
<b>QC Batch ID: BZG1718</b>						
Dissolved Antimony	BZG1718-BLK3	ND	ug/L	100	4.9	
Dissolved Arsenic	BZG1718-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BZG1718-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BZG1718-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BZG1718-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BZG1718-BLK1	ND	ug/L	50	1.1	
Dissolved Copper	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Lead	BZG1718-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BZG1718-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BZG1718-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BZG1718-BLK2	ND	ug/L	100	15	
Dissolved Silver	BZG1718-BLK1	ND	ug/L	10	1.2	
Dissolved Thallium	BZG1718-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BZG1718-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BZG1718-BLK1	ND	ug/L	10	5.0	

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## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0964</b>									
Dissolved Mercury	BZG0964-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Antimony	BZG1718-BS3	LCS	392.92	400.00	ug/L	98.2		85 - 115	
Dissolved Arsenic	BZG1718-BS1	LCS	191.58	200.00	ug/L	95.8		85 - 115	
Dissolved Barium	BZG1718-BS1	LCS	426.39	400.00	ug/L	107		85 - 115	
Dissolved Beryllium	BZG1718-BS1	LCS	196.37	200.00	ug/L	98.2		85 - 115	
Dissolved Cadmium	BZG1718-BS1	LCS	190.60	200.00	ug/L	95.3		85 - 115	
Dissolved Chromium	BZG1718-BS1	LCS	202.76	200.00	ug/L	101		85 - 115	
Dissolved Cobalt	BZG1718-BS1	LCS	212.53	200.00	ug/L	106		85 - 115	
Dissolved Copper	BZG1718-BS1	LCS	407.78	400.00	ug/L	102		85 - 115	
Dissolved Lead	BZG1718-BS1	LCS	433.22	400.00	ug/L	108		85 - 115	
Dissolved Molybdenum	BZG1718-BS1	LCS	219.69	200.00	ug/L	110		85 - 115	
Dissolved Nickel	BZG1718-BS1	LCS	417.27	400.00	ug/L	104		85 - 115	
Dissolved Selenium	BZG1718-BS2	LCS	190.81	200.00	ug/L	95.4		85 - 115	
Dissolved Silver	BZG1718-BS1	LCS	96.982	100.00	ug/L	97.0		85 - 115	
Dissolved Thallium	BZG1718-BS1	LCS	452.28	400.00	ug/L	113		85 - 115	
Dissolved Vanadium	BZG1718-BS1	LCS	210.65	200.00	ug/L	105		85 - 115	
Dissolved Zinc	BZG1718-BS1	LCS	467.11	500.00	ug/L	93.4		85 - 115	

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## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0964</b>		Used client sample: N								
Dissolved Mercury	DUP	1618920-01	ND	0.032500		ug/L		20		J
	MS	1618920-01	ND	0.96750	1.0000	ug/L		96.8	70 - 130	
	MSD	1618920-01	ND	0.97500	1.0000	ug/L	0.8	97.5	20	70 - 130
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Antimony	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	683.99	816.33	ug/L		83.8	75 - 125	
	MSD	1619000-01	ND	683.57	816.33	ug/L	0.1	83.7	20	75 - 125
Dissolved Arsenic	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	192.74	204.08	ug/L		94.4	75 - 125	
	MSD	1619000-01	ND	193.05	204.08	ug/L	0.2	94.6	20	75 - 125
Dissolved Barium	DUP	1619000-01	27.007	28.392		ug/L	5.0	20		
	MS	1619000-01	27.007	464.00	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	27.007	452.87	408.16	ug/L	2.4	104	20	75 - 125
Dissolved Beryllium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	207.46	204.08	ug/L		102	75 - 125	
	MSD	1619000-01	ND	202.14	204.08	ug/L	2.6	99.0	20	75 - 125
Dissolved Cadmium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	214.64	204.08	ug/L		105	75 - 125	
	MSD	1619000-01	ND	208.71	204.08	ug/L	2.8	102	20	75 - 125
Dissolved Chromium	DUP	1619000-01	2.8866	2.5637		ug/L	11.8	20		J
	MS	1619000-01	2.8866	206.10	204.08	ug/L		99.6	75 - 125	
	MSD	1619000-01	2.8866	201.87	204.08	ug/L	2.1	97.5	20	75 - 125
Dissolved Cobalt	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	210.09	204.08	ug/L		103	75 - 125	
	MSD	1619000-01	ND	204.75	204.08	ug/L	2.6	100	20	75 - 125
Dissolved Copper	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	393.85	408.16	ug/L		96.5	75 - 125	
	MSD	1619000-01	ND	394.42	408.16	ug/L	0.1	96.6	20	75 - 125
Dissolved Lead	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	438.45	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	ND	424.70	408.16	ug/L	3.2	104	20	75 - 125
Dissolved Molybdenum	DUP	1619000-01	2.6371	2.6599		ug/L	0.9	20		J
	MS	1619000-01	2.6371	204.69	204.08	ug/L		99.0	75 - 125	
	MSD	1619000-01	2.6371	202.27	204.08	ug/L	1.2	97.8	20	75 - 125
Dissolved Nickel	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	415.15	408.16	ug/L		102	75 - 125	
	MSD	1619000-01	ND	410.58	408.16	ug/L	1.1	101	20	75 - 125

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:14  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Selenium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	247.94	204.08	ug/L		121		75 - 125
	MSD	1619000-01	ND	246.47	204.08	ug/L	0.6	121	20	75 - 125
Dissolved Silver	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	97.719	102.04	ug/L		95.8		75 - 125
	MSD	1619000-01	ND	96.062	102.04	ug/L	1.7	94.1	20	75 - 125
Dissolved Thallium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	465.08	408.16	ug/L		114		75 - 125
	MSD	1619000-01	ND	451.43	408.16	ug/L	3.0	111	20	75 - 125
Dissolved Vanadium	DUP	1619000-01	ND	2.3483		ug/L			20	J
	MS	1619000-01	ND	212.18	204.08	ug/L		104		75 - 125
	MSD	1619000-01	ND	207.85	204.08	ug/L	2.1	102	20	75 - 125
Dissolved Zinc	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	509.68	510.20	ug/L		99.9		75 - 125
	MSD	1619000-01	ND	493.49	510.20	ug/L	3.2	96.7	20	75 - 125



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## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 08/30/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100/2A  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619002  
Invoice ID: B241490, B244798

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## BC Laboratories, Inc.

16-19002

## Report To:

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911

## Chain of Custody

Lab #		Date Sampled	Time Sampled	Matrix	Analysis Requested		Comments
					Short Holding Time	No. OP SS	
1	M6-6 Port 1 (3610038-711)				Gr <sup>+15</sup> NO <sub>2</sub>	NO <sub>x</sub> COT	
2	M6-6 Port 2 (3610038-712)				DO Gr <sub>2</sub> BOD	WMA <sub>3</sub> COT	
3	M6-6 Port 3 (3610038-713)				CHK BY DISTRIBUTION		
4	M6-6 Port 4 (3610038-714)				STATION		
5	M6-6 Port 5 (3610038-715)				STATION		
6	M6-6 Port 6 (3610038-716)				STATION		
7	M6-6 Port 7 (3610038-717)				STATION		
8	N-14 Shallow (3610038-718)				STATION		
9	N-14 Deep (3610038-719)	7-10-16	1430	Gr <sub>2</sub>	X	X	X
10							
11							
12							

Reinquished by: (Signature) Received By: (Signature) Date & Time  
 Reinquished by: (Signature) Received by: (Signature) Date & Time  
 Reinquished by: (Signature) Received By: (Signature) Date & Time  
 Reinquished by: (Signature) Received by: (Signature) Date & Time

**Samples need EDT**  
 BC's testing to include 1,2,3-TCP, TAME, TBA, ETSE and 1,1,2-TCFA.  
 Metals are Field Collected.



## Chain of Custody and Cooler Receipt Form for 1619002 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page <u>1</u> Of <u>1</u>		
Submission #: <u>1619002</u>										
SHIPPING INFORMATION				SHIPPING CONTAINER			FREE LIQUID			
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>		
BC Lab Field Service <input checked="" type="checkbox"/>				Other <input type="checkbox"/> (Specify) _____			W <input checked="" type="checkbox"/>	S <input type="checkbox"/>		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>				Comments: _____						
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>	Container: <u>PE</u>	Thermometer ID: <u>208</u>		Date/Time <u>ARL 7-12</u>				
		Temperature: (A) <u>0.1</u> °C / (C) <u>0.2</u> °C			Analyst Init <u>ARL 1800</u>					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	<u>D</u>									
4oz / 8oz / 16oz PE UNPRES	<u>E</u>									
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	<u>F</u>									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	<u>ABC</u>									
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: _____										
Sample Numbering Completed By: _____	Date/Time: <u>7/12/16 1825</u> Rev 21 05/23/2016									
= Actual / C = Corrected	(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMREC\Rev 20)									

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**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619002-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N-14 Deep (3610038-719) <b>Sampled By:</b> Adam Shaw	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 14:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater Metal Analysis: 1-Field Filtered and Acidified District ID: TAN System Number: 3610038 Station Number: 3610038-719 Holding Times Met:		

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**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619002-01	Client Sample Name: N-14 Deep (3610038-719), 7/11/2016 2:30:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619002-01	Client Sample Name: N-14 Deep (3610038-719), 7/11/2016 2:30:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619002-01	Client Sample Name: N-14 Deep (3610038-719), 7/11/2016 2:30:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/13/16	07/13/16 14:26	JMS	MS-V14	1	BZG0961

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**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619002-01	Client Sample Name: N-14 Deep (3610038-719), 7/11/2016 2:30:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	4.1	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	0.30	mg/L	0.050	0.019	EPA-6010B	ND		1
Dissolved Sodium	3.4	mg/L	0.50	0.051	EPA-6010B	0.065		1
Dissolved Potassium	5.1	mg/L	1.0	0.10	EPA-6010B	ND		1
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Total Alkalinity as CaCO <sub>3</sub>	23	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	1.2	mg/L	0.50	0.092	EPA-300.0	ND		3
Nitrate as N	0.25	mg/L	0.10	0.022	EPA-300.0	ND		3
Sulfate	2.0	mg/L	1.0	0.14	EPA-300.0	ND		3
Dissolved Hardness as CaCO <sub>3</sub>	11	mg/L	0.50	0.10	Calc	ND		4
Total Dissolved Solids @ 180 C	35	mg/L	6.7	6.7	EPA-160.1	ND		5
MBAS	0.079	mg/L	0.10	0.015	EPA-425.1	ND	J	6
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		7

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/22/16 11:55	JCC	PE-OP3	1	BZG1718
2	EPA-310.1	07/14/16	07/14/16 14:51	RML	MET-1	1	BZG1043
3	EPA-300.0	07/12/16	07/12/16 22:50	JSW	IC5	1	BZG0886
4	Calc	07/13/16	07/26/16 08:33	JKS	Calc	1	BZG0895
5	EPA-160.1	07/14/16	07/14/16 13:00	CAD	MANUAL	0.667	BZG1111
6	EPA-425.1	07/13/16	07/13/16 09:00	JMN	MANUAL	1	BZG0967
7	EPA-314.0	07/18/16	07/18/16 15:46	JSW	IC6	1	BZG1349

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**Project Manager:** Jason Sapp

## Metals Analysis

BCL Sample ID:	1619002-01	Client Sample Name: N-14 Deep (3610038-719), 7/11/2016 2:30:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	200	9.8	EPA-6010B	ND	A07	1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		2
<b>Dissolved Barium</b>	<b>8.7</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND	<b>J</b>	<b>2</b>
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		2
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		2
Dissolved Chromium	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		2
<b>Dissolved Copper</b>	<b>2.1</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	<b>2</b>
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		2
Dissolved Mercury	ND	ug/L	0.20	0.030	EPA-7470A	ND		3
Dissolved Molybdenum	ND	ug/L	50	1.4	EPA-6010B	ND		2
Dissolved Nickel	ND	ug/L	10	2.4	EPA-6010B	ND		2
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		4
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		2
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		2
Dissolved Vanadium	ND	ug/L	10	2.2	EPA-6010B	ND		2
<b>Dissolved Zinc</b>	<b>310</b>	<b>ug/L</b>	<b>10</b>	<b>5.0</b>	<b>EPA-6010B</b>	ND		<b>2</b>

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/25/16 11:29	JCC	PE-OP3	2	BZG1718
2	EPA-6010B	07/20/16	07/22/16 11:55	JCC	PE-OP3	1	BZG1718
3	EPA-7470A	07/15/16	07/19/16 09:22	MEV	CETAC2	1	BZG1230
4	EPA-6010B	07/20/16	07/25/16 10:43	JCC	PE-OP3	1	BZG1718

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
Benzene	BZG0961-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG0961-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG0961-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.14	

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Ontario, CA 91761

**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
trans-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG0961-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG0961-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG0961-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG0961-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG0961-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG0961-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG0961-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG0961-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG0961-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG0961-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.18	

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Ontario, CA 91761

**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
2-Hexanone	BZG0961-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG0961-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG0961-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG0961-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG0961-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG0961-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG0961-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG0961-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG0961-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG0961-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG0961-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BLK1	92.6	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG0961-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG0961-BLK1	97.5	%	80 - 120 (LCL - UCL)		

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**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0961</b>									
Benzene	BZG0961-BS1	LCS	22.654	25.000	ug/L	90.6	70 - 130		
Bromodichloromethane	BZG0961-BS1	LCS	21.392	25.000	ug/L	85.6	70 - 130		
Chlorobenzene	BZG0961-BS1	LCS	23.094	25.000	ug/L	92.4	70 - 130		
Chloroethane	BZG0961-BS1	LCS	21.507	25.000	ug/L	86.0	70 - 130		
1,4-Dichlorobenzene	BZG0961-BS1	LCS	22.297	25.000	ug/L	89.2	70 - 130		
1,1-Dichloroethane	BZG0961-BS1	LCS	23.496	25.000	ug/L	94.0	70 - 130		
1,1-Dichloroethene	BZG0961-BS1	LCS	22.900	25.000	ug/L	91.6	70 - 130		
Toluene	BZG0961-BS1	LCS	22.288	25.000	ug/L	89.2	70 - 130		
Trichloroethene	BZG0961-BS1	LCS	23.682	25.000	ug/L	94.7	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BS1	LCS	9.8600	10.000	ug/L	98.6	75 - 125		
Toluene-d8 (Surrogate)	BZG0961-BS1	LCS	9.8300	10.000	ug/L	98.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG0961-BS1	LCS	9.7500	10.000	ug/L	97.5	80 - 120		

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Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0961</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Benzene	MS	1619000-01	ND	26.830	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.463	25.000	ug/L	1.4	106	20	70 - 130
Bromodichloromethane	MS	1619000-01	ND	25.963	25.000	ug/L		104		70 - 130
	MSD	1619000-01	ND	25.020	25.000	ug/L	3.7	100	20	70 - 130
Chlorobenzene	MS	1619000-01	ND	27.564	25.000	ug/L		110		70 - 130
	MSD	1619000-01	ND	26.616	25.000	ug/L	3.5	106	20	70 - 130
Chloroethane	MS	1619000-01	ND	25.630	25.000	ug/L		103		70 - 130
	MSD	1619000-01	ND	24.908	25.000	ug/L	2.9	99.6	20	70 - 130
1,4-Dichlorobenzene	MS	1619000-01	ND	26.699	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.201	25.000	ug/L	1.9	105	20	70 - 130
1,1-Dichloroethane	MS	1619000-01	ND	27.839	25.000	ug/L		111		70 - 130
	MSD	1619000-01	ND	27.556	25.000	ug/L	1.0	110	20	70 - 130
1,1-Dichloroethene	MS	1619000-01	ND	26.916	25.000	ug/L		108		70 - 130
	MSD	1619000-01	ND	26.440	25.000	ug/L	1.8	106	20	70 - 130
Toluene	MS	1619000-01	ND	26.679	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	25.906	25.000	ug/L	2.9	104	20	70 - 130
Trichloroethene	MS	1619000-01	0.88500	27.814	25.000	ug/L		108		70 - 130
	MSD	1619000-01	0.88500	27.305	25.000	ug/L	1.8	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619000-01	ND	10.060	10.000	ug/L		101		75 - 125
	MSD	1619000-01	ND	9.9800	10.000	ug/L	0.8	99.8		75 - 125
Toluene-d8 (Surrogate)	MS	1619000-01	ND	10.020	10.000	ug/L		100		80 - 120
	MSD	1619000-01	ND	9.9000	10.000	ug/L	1.2	99.0		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619000-01	ND	9.7400	10.000	ug/L		97.4		80 - 120
	MSD	1619000-01	ND	9.6900	10.000	ug/L	0.5	96.9		80 - 120

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**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0886</b>						
Chloride	BZG0886-BLK1	ND	mg/L	0.50	0.092	
Nitrate as N	BZG0886-BLK1	ND	mg/L	0.10	0.022	
Sulfate	BZG0886-BLK1	ND	mg/L	1.0	0.14	
<b>QC Batch ID: BZG0895</b>						
Dissolved Hardness as CaCO <sub>3</sub>	BZG0895-BLK1	ND	mg/L	0.50	0.10	
<b>QC Batch ID: BZG0967</b>						
MBAS	BZG0967-BLK1	ND	mg/L	0.10	0.015	
<b>QC Batch ID: BZG1043</b>						
Hydroxide	BZG1043-BLK1	ND	mg/L	1.4	1.4	
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BLK1	ND	mg/L	4.1	4.1	
<b>QC Batch ID: BZG1111</b>						
Total Dissolved Solids @ 180 C	BZG1111-BLK1	ND	mg/L	6.7	6.7	
<b>QC Batch ID: BZG1349</b>						
Perchlorate	BZG1349-BLK1	ND	ug/L	4.0	0.72	
<b>QC Batch ID: BZG1718</b>						
Dissolved Calcium	BZG1718-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BZG1718-BLK1	ND	mg/L	0.050	0.019	
<b>Dissolved Sodium</b>	<b>BZG1718-BLK1</b>	<b>0.064942</b>	<b>mg/L</b>	<b>0.50</b>	<b>0.051</b>	<b>J</b>
Dissolved Potassium	BZG1718-BLK1	ND	mg/L	1.0	0.10	

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Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0886</b>									
Chloride	BZG0886-BS1	LCS	52.434	50.000	mg/L	105		90 - 110	
Nitrate as N	BZG0886-BS1	LCS	5.1670	5.0000	mg/L	103		90 - 110	
Sulfate	BZG0886-BS1	LCS	103.97	100.00	mg/L	104		90 - 110	
<b>QC Batch ID: BZG0967</b>									
MBAS	BZG0967-BS1	LCS	0.20560	0.20000	mg/L	103		85 - 115	
<b>QC Batch ID: BZG1043</b>									
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BS3	LCS	105.12	100.00	mg/L	105		90 - 110	
<b>QC Batch ID: BZG1111</b>									
Total Dissolved Solids @ 180 C	BZG1111-BS1	LCS	615.00	586.00	mg/L	105		90 - 110	
<b>QC Batch ID: BZG1349</b>									
Perchlorate	BZG1349-BS1	LCS	8.9030	10.000	ug/L	89.0		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Calcium	BZG1718-BS1	LCS	11.040	10.000	mg/L	110		85 - 115	
Dissolved Magnesium	BZG1718-BS1	LCS	10.243	10.000	mg/L	102		85 - 115	
Dissolved Sodium	BZG1718-BS1	LCS	10.763	10.000	mg/L	108		85 - 115	
Dissolved Potassium	BZG1718-BS1	LCS	10.315	10.000	mg/L	103		85 - 115	

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Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0886</b>		Used client sample: Y - Description: N15-4, 07/11/2016 16:05								
Chloride	DUP	1619003-01	3.3100	3.2630		mg/L	1.4		10	
	MS	1619003-01	3.3100	53.288	50.505	mg/L		99.0		80 - 120
	MSD	1619003-01	3.3100	53.012	50.505	mg/L	0.5	98.4	10	80 - 120
Nitrate as N	DUP	1619003-01	1.3180	1.3000		mg/L	1.4		10	
	MS	1619003-01	1.3180	6.1172	5.0505	mg/L		95.0		80 - 120
	MSD	1619003-01	1.3180	6.1020	5.0505	mg/L	0.2	94.7	10	80 - 120
Sulfate	DUP	1619003-01	13.686	13.462		mg/L	1.7		10	
	MS	1619003-01	13.686	113.24	101.01	mg/L		98.6		80 - 120
	MSD	1619003-01	13.686	113.07	101.01	mg/L	0.1	98.4	10	80 - 120
<b>QC Batch ID: BZG0967</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
MBAS	DUP	1619000-01	ND	ND		mg/L			20	
	MS	1619000-01	ND	0.41640	0.40000	mg/L		104		80 - 120
	MSD	1619000-01	ND	0.42660	0.40000	mg/L	2.4	107	20	80 - 120
<b>QC Batch ID: BZG1043</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Hydroxide	DUP	1619000-01	ND	ND		mg/L			10	
Total Alkalinity as CaCO3	DUP	1619000-01	166.59	164.00		mg/L	1.6		10	
<b>QC Batch ID: BZG1111</b>		Used client sample: N								
Total Dissolved Solids @ 180 C	DUP	1618639-01	5030.0	4990.0		mg/L	0.8		10	
<b>QC Batch ID: BZG1349</b>		Used client sample: N								
Perchlorate	DUP	1618848-04	0.93990	0.92680		ug/L	1.4		15	J
	MS	1618848-04	0.93990	10.147	10.101	ug/L		91.2		80 - 120
	MSD	1618848-04	0.93990	9.8860	10.101	ug/L	2.6	88.6	15	80 - 120
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Calcium	DUP	1619000-01	66.062	64.528		mg/L	2.3		20	
	MS	1619000-01	66.062	72.914	10.204	mg/L		67.1		75 - 125
	MSD	1619000-01	66.062	72.796	10.204	mg/L	0.2	66.0	20	75 - 125
Dissolved Magnesium	DUP	1619000-01	9.1115	9.2802		mg/L	1.8		20	
	MS	1619000-01	9.1115	19.300	10.204	mg/L		99.8		75 - 125
	MSD	1619000-01	9.1115	18.724	10.204	mg/L	3.0	94.2	20	75 - 125
Dissolved Sodium	DUP	1619000-01	13.160	13.094		mg/L	0.5		20	
	MS	1619000-01	13.160	23.401	10.204	mg/L		100		75 - 125
	MSD	1619000-01	13.160	22.818	10.204	mg/L	2.5	94.6	20	75 - 125
Dissolved Potassium	DUP	1619000-01	3.2973	3.3530		mg/L	1.7		20	
	MS	1619000-01	3.2973	13.671	10.204	mg/L		102		75 - 125
	MSD	1619000-01	3.2973	13.012	10.204	mg/L	4.9	95.2	20	75 - 125

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1230</b>						
Dissolved Mercury	BZG1230-BLK1	ND	ug/L	0.20	0.030	
<b>QC Batch ID: BZG1718</b>						
Dissolved Antimony	BZG1718-BLK3	ND	ug/L	100	4.9	
Dissolved Arsenic	BZG1718-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BZG1718-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BZG1718-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BZG1718-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BZG1718-BLK1	ND	ug/L	50	1.1	
Dissolved Copper	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Lead	BZG1718-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BZG1718-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BZG1718-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BZG1718-BLK2	ND	ug/L	100	15	
Dissolved Silver	BZG1718-BLK1	ND	ug/L	10	1.2	
Dissolved Thallium	BZG1718-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BZG1718-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BZG1718-BLK1	ND	ug/L	10	5.0	

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Ontario, CA 91761

Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1230</b>									
Dissolved Mercury	BZG1230-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Antimony	BZG1718-BS3	LCS	392.92	400.00	ug/L	98.2		85 - 115	
Dissolved Arsenic	BZG1718-BS1	LCS	191.58	200.00	ug/L	95.8		85 - 115	
Dissolved Barium	BZG1718-BS1	LCS	426.39	400.00	ug/L	107		85 - 115	
Dissolved Beryllium	BZG1718-BS1	LCS	196.37	200.00	ug/L	98.2		85 - 115	
Dissolved Cadmium	BZG1718-BS1	LCS	190.60	200.00	ug/L	95.3		85 - 115	
Dissolved Chromium	BZG1718-BS1	LCS	202.76	200.00	ug/L	101		85 - 115	
Dissolved Cobalt	BZG1718-BS1	LCS	212.53	200.00	ug/L	106		85 - 115	
Dissolved Copper	BZG1718-BS1	LCS	407.78	400.00	ug/L	102		85 - 115	
Dissolved Lead	BZG1718-BS1	LCS	433.22	400.00	ug/L	108		85 - 115	
Dissolved Molybdenum	BZG1718-BS1	LCS	219.69	200.00	ug/L	110		85 - 115	
Dissolved Nickel	BZG1718-BS1	LCS	417.27	400.00	ug/L	104		85 - 115	
Dissolved Selenium	BZG1718-BS2	LCS	190.81	200.00	ug/L	95.4		85 - 115	
Dissolved Silver	BZG1718-BS1	LCS	96.982	100.00	ug/L	97.0		85 - 115	
Dissolved Thallium	BZG1718-BS1	LCS	452.28	400.00	ug/L	113		85 - 115	
Dissolved Vanadium	BZG1718-BS1	LCS	210.65	200.00	ug/L	105		85 - 115	
Dissolved Zinc	BZG1718-BS1	LCS	467.11	500.00	ug/L	93.4		85 - 115	



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Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1230</b>		Used client sample: N								
Dissolved Mercury	DUP	1619297-01	ND	ND		ug/L		20		
	MS	1619297-01	ND	1.0675	1.0000	ug/L		107	70 - 130	
	MSD	1619297-01	ND	1.0175	1.0000	ug/L	4.8	102	20	70 - 130
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Antimony	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	683.99	816.33	ug/L		83.8	75 - 125	
	MSD	1619000-01	ND	683.57	816.33	ug/L	0.1	83.7	20	75 - 125
Dissolved Arsenic	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	192.74	204.08	ug/L		94.4	75 - 125	
	MSD	1619000-01	ND	193.05	204.08	ug/L	0.2	94.6	20	75 - 125
Dissolved Barium	DUP	1619000-01	27.007	28.392		ug/L	5.0	20		
	MS	1619000-01	27.007	464.00	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	27.007	452.87	408.16	ug/L	2.4	104	20	75 - 125
Dissolved Beryllium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	207.46	204.08	ug/L		102	75 - 125	
	MSD	1619000-01	ND	202.14	204.08	ug/L	2.6	99.0	20	75 - 125
Dissolved Cadmium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	214.64	204.08	ug/L		105	75 - 125	
	MSD	1619000-01	ND	208.71	204.08	ug/L	2.8	102	20	75 - 125
Dissolved Chromium	DUP	1619000-01	2.8866	2.5637		ug/L	11.8	20		J
	MS	1619000-01	2.8866	206.10	204.08	ug/L		99.6	75 - 125	
	MSD	1619000-01	2.8866	201.87	204.08	ug/L	2.1	97.5	20	75 - 125
Dissolved Cobalt	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	210.09	204.08	ug/L		103	75 - 125	
	MSD	1619000-01	ND	204.75	204.08	ug/L	2.6	100	20	75 - 125
Dissolved Copper	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	393.85	408.16	ug/L		96.5	75 - 125	
	MSD	1619000-01	ND	394.42	408.16	ug/L	0.1	96.6	20	75 - 125
Dissolved Lead	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	438.45	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	ND	424.70	408.16	ug/L	3.2	104	20	75 - 125
Dissolved Molybdenum	DUP	1619000-01	2.6371	2.6599		ug/L	0.9	20		J
	MS	1619000-01	2.6371	204.69	204.08	ug/L		99.0	75 - 125	
	MSD	1619000-01	2.6371	202.27	204.08	ug/L	1.2	97.8	20	75 - 125
Dissolved Nickel	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	415.15	408.16	ug/L		102	75 - 125	
	MSD	1619000-01	ND	410.58	408.16	ug/L	1.1	101	20	75 - 125

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/30/2016 16:13  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Selenium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	247.94	204.08	ug/L		121		75 - 125
	MSD	1619000-01	ND	246.47	204.08	ug/L	0.6	121	20	75 - 125
Dissolved Silver	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	97.719	102.04	ug/L		95.8		75 - 125
	MSD	1619000-01	ND	96.062	102.04	ug/L	1.7	94.1	20	75 - 125
Dissolved Thallium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	465.08	408.16	ug/L		114		75 - 125
	MSD	1619000-01	ND	451.43	408.16	ug/L	3.0	111	20	75 - 125
Dissolved Vanadium	DUP	1619000-01	ND	2.3483		ug/L			20	J
	MS	1619000-01	ND	212.18	204.08	ug/L		104		75 - 125
	MSD	1619000-01	ND	207.85	204.08	ug/L	2.1	102	20	75 - 125
Dissolved Zinc	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	509.68	510.20	ug/L		99.9		75 - 125
	MSD	1619000-01	ND	493.49	510.20	ug/L	3.2	96.7	20	75 - 125



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**Reported:** 08/30/2016 16:13  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013.0100/2A  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619003  
Invoice ID: B241491

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Tina Green  
Client Services Manager



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody Form

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## Chain of Custody and Cooler Receipt Form for 1619003 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM			Page <u>1</u> Of <u>1</u>					
Submission #: <u>16-19003</u>										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W</u> S							
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals	Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input type="checkbox"/> Comments: _____									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>208</u> Temperature: (A) <u>0.1</u> °C / (C) <u>0.2</u> °C	Date/Time <u>ARL 7.12</u> Analyst Init <u>ARL 1800</u>								
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	<u>1</u>									
4oz / 8oz / 16oz PE UNPRES	<u>2</u>									
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	<u>+</u>									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	<u>ArC</u>									
QT EPA 1664										
PT ODO										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: _____						Date/Time: <u>7/12/16 18:15</u>	Rev 21 05/23/2016			
Sample Numbering Completed By: <u>M</u>						(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\1SAMREC\rev 20)				
<input checked="" type="checkbox"/> = Actual / <input type="checkbox"/> = Corrected										

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1619003-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N15-4 <b>Sampled By:</b> Adam Shaw	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 16:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater Metal Analysis: 1-Field Filtered and Acidified	

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Ontario, CA 91761

**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619003-01	Client Sample Name: N15-4, 7/11/2016 4:05:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619003-01	Client Sample Name:	N15-4, 7/11/2016 4:05:00PM, Adam Shaw					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619003-01	Client Sample Name: N15-4, 7/11/2016 4:05:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/13/16	07/13/16 14:49	JMS	MS-V14	1	BZG0961

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Ontario, CA 91761

Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigation

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619003-01	Client Sample Name: N15-4, 7/11/2016 4:05:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	50	mg/L	0.10	0.016	EPA-6010B	ND		1
Dissolved Magnesium	5.9	mg/L	0.050	0.019	EPA-6010B	ND		1
Dissolved Sodium	15	mg/L	0.50	0.051	EPA-6010B	0.065		1
Dissolved Potassium	2.2	mg/L	1.0	0.10	EPA-6010B	ND		1
Hydroxide	ND	mg/L	1.4	1.4	EPA-310.1	ND		2
Total Alkalinity as CaCO <sub>3</sub>	150	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	3.3	mg/L	0.50	0.092	EPA-300.0	ND		3
Nitrate as N	1.3	mg/L	0.10	0.022	EPA-300.0	ND		3
Sulfate	14	mg/L	1.0	0.14	EPA-300.0	ND		3
Dissolved Hardness as CaCO <sub>3</sub>	150	mg/L	0.50	0.10	Calc	ND		4
Total Dissolved Solids @ 180 C	220	mg/L	20	20	EPA-160.1	ND		5
MBAS	ND	mg/L	0.10	0.015	EPA-425.1	ND		6
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		7

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-6010B	07/20/16	07/22/16 11:53	JCC	PE-OP3	1	BZG1718
2	EPA-310.1	07/14/16	07/14/16 14:57	RML	MET-1	1	BZG1043
3	EPA-300.0	07/12/16	07/12/16 21:44	JSW	IC5	1	BZG0886
4	Calc	07/13/16	07/26/16 08:34	JKS	Calc	1	BZG0896
5	EPA-160.1	07/15/16	07/15/16 11:00	CAD	MANUAL	2	BZG1233
6	EPA-425.1	07/13/16	07/13/16 09:00	JMN	MANUAL	1	BZG0967
7	EPA-314.0	07/18/16	07/19/16 13:07	EMW	IC6	1	BZG1551

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Ontario, CA 91761

Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigator

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Metals Analysis

BCL Sample ID:	1619003-01	Client Sample Name: N15-4, 7/11/2016 4:05:00PM, Adam Shaw						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Antimony	ND	ug/L	200	9.8	EPA-6010B	ND	A07	1
Dissolved Arsenic	ND	ug/L	50	9.2	EPA-6010B	ND		2
<b>Dissolved Barium</b>	<b>26</b>	<b>ug/L</b>	<b>10</b>	<b>3.5</b>	<b>EPA-6010B</b>	ND		2
Dissolved Beryllium	ND	ug/L	10	0.50	EPA-6010B	ND		2
Dissolved Cadmium	ND	ug/L	10	1.1	EPA-6010B	ND		2
<b>Dissolved Chromium</b>	<b>1.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.0</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Cobalt	ND	ug/L	50	1.1	EPA-6010B	ND		2
Dissolved Copper	ND	ug/L	10	1.0	EPA-6010B	ND		2
Dissolved Lead	ND	ug/L	50	3.5	EPA-6010B	ND		2
Dissolved Mercury	ND	ug/L	0.20	0.030	EPA-7470A	ND		3
<b>Dissolved Molybdenum</b>	<b>3.0</b>	<b>ug/L</b>	<b>50</b>	<b>1.4</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Nickel	ND	ug/L	10	2.4	EPA-6010B	ND		2
Dissolved Selenium	ND	ug/L	100	15	EPA-6010B	ND		4
Dissolved Silver	ND	ug/L	10	1.2	EPA-6010B	ND		2
Dissolved Thallium	ND	ug/L	100	10	EPA-6010B	ND		2
<b>Dissolved Vanadium</b>	<b>5.4</b>	<b>ug/L</b>	<b>10</b>	<b>2.2</b>	<b>EPA-6010B</b>	ND	<b>J</b>	2
Dissolved Zinc	ND	ug/L	10	5.0	EPA-6010B	ND		2

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-6010B	07/20/16	07/25/16	11:31	JCC	PE-OP3	2	BZG1718
2	EPA-6010B	07/20/16	07/22/16	11:53	JCC	PE-OP3	1	BZG1718
3	EPA-7470A	07/15/16	07/19/16	09:29	MEV	CETAC2	1	BZG1230
4	EPA-6010B	07/20/16	07/25/16	10:45	JCC	PE-OP3	1	BZG1718

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
Benzene	BZG0961-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG0961-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG0961-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG0961-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
trans-1,3-Dichloropropene	BZG0961-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG0961-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG0961-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG0961-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG0961-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG0961-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG0961-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG0961-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG0961-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG0961-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG0961-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG0961-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG0961-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG0961-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG0961-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG0961-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG0961-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG0961-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG0961-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG0961-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0961</b>						
2-Hexanone	BZG0961-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG0961-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG0961-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG0961-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG0961-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG0961-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG0961-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG0961-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG0961-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG0961-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG0961-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BLK1	92.6	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG0961-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG0961-BLK1	97.5	%	80 - 120 (LCL - UCL)		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0961</b>									
Benzene	BZG0961-BS1	LCS	22.654	25.000	ug/L	90.6	70 - 130		
Bromodichloromethane	BZG0961-BS1	LCS	21.392	25.000	ug/L	85.6	70 - 130		
Chlorobenzene	BZG0961-BS1	LCS	23.094	25.000	ug/L	92.4	70 - 130		
Chloroethane	BZG0961-BS1	LCS	21.507	25.000	ug/L	86.0	70 - 130		
1,4-Dichlorobenzene	BZG0961-BS1	LCS	22.297	25.000	ug/L	89.2	70 - 130		
1,1-Dichloroethane	BZG0961-BS1	LCS	23.496	25.000	ug/L	94.0	70 - 130		
1,1-Dichloroethene	BZG0961-BS1	LCS	22.900	25.000	ug/L	91.6	70 - 130		
Toluene	BZG0961-BS1	LCS	22.288	25.000	ug/L	89.2	70 - 130		
Trichloroethene	BZG0961-BS1	LCS	23.682	25.000	ug/L	94.7	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG0961-BS1	LCS	9.8600	10.000	ug/L	98.6	75 - 125		
Toluene-d8 (Surrogate)	BZG0961-BS1	LCS	9.8300	10.000	ug/L	98.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG0961-BS1	LCS	9.7500	10.000	ug/L	97.5	80 - 120		

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Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigator

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG0961</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Benzene	MS	1619000-01	ND	26.830	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.463	25.000	ug/L	1.4	106	20	70 - 130
Bromodichloromethane	MS	1619000-01	ND	25.963	25.000	ug/L		104		70 - 130
	MSD	1619000-01	ND	25.020	25.000	ug/L	3.7	100	20	70 - 130
Chlorobenzene	MS	1619000-01	ND	27.564	25.000	ug/L		110		70 - 130
	MSD	1619000-01	ND	26.616	25.000	ug/L	3.5	106	20	70 - 130
Chloroethane	MS	1619000-01	ND	25.630	25.000	ug/L		103		70 - 130
	MSD	1619000-01	ND	24.908	25.000	ug/L	2.9	99.6	20	70 - 130
1,4-Dichlorobenzene	MS	1619000-01	ND	26.699	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	26.201	25.000	ug/L	1.9	105	20	70 - 130
1,1-Dichloroethane	MS	1619000-01	ND	27.839	25.000	ug/L		111		70 - 130
	MSD	1619000-01	ND	27.556	25.000	ug/L	1.0	110	20	70 - 130
1,1-Dichloroethene	MS	1619000-01	ND	26.916	25.000	ug/L		108		70 - 130
	MSD	1619000-01	ND	26.440	25.000	ug/L	1.8	106	20	70 - 130
Toluene	MS	1619000-01	ND	26.679	25.000	ug/L		107		70 - 130
	MSD	1619000-01	ND	25.906	25.000	ug/L	2.9	104	20	70 - 130
Trichloroethene	MS	1619000-01	0.88500	27.814	25.000	ug/L		108		70 - 130
	MSD	1619000-01	0.88500	27.305	25.000	ug/L	1.8	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619000-01	ND	10.060	10.000	ug/L		101		75 - 125
	MSD	1619000-01	ND	9.9800	10.000	ug/L	0.8	99.8		75 - 125
Toluene-d8 (Surrogate)	MS	1619000-01	ND	10.020	10.000	ug/L		100		80 - 120
	MSD	1619000-01	ND	9.9000	10.000	ug/L	1.2	99.0		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619000-01	ND	9.7400	10.000	ug/L		97.4		80 - 120
	MSD	1619000-01	ND	9.6900	10.000	ug/L	0.5	96.9		80 - 120

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG0886</b>						
Chloride	BZG0886-BLK1	ND	mg/L	0.50	0.092	
Nitrate as N	BZG0886-BLK1	ND	mg/L	0.10	0.022	
Sulfate	BZG0886-BLK1	ND	mg/L	1.0	0.14	
<b>QC Batch ID: BZG0896</b>						
Dissolved Hardness as CaCO <sub>3</sub>	BZG0896-BLK1	ND	mg/L	0.50	0.10	
<b>QC Batch ID: BZG0967</b>						
MBAS	BZG0967-BLK1	ND	mg/L	0.10	0.015	
<b>QC Batch ID: BZG1043</b>						
Hydroxide	BZG1043-BLK1	ND	mg/L	1.4	1.4	
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BLK1	ND	mg/L	4.1	4.1	
<b>QC Batch ID: BZG1233</b>						
Total Dissolved Solids @ 180 C	BZG1233-BLK1	ND	mg/L	6.7	6.7	
<b>QC Batch ID: BZG1551</b>						
Perchlorate	BZG1551-BLK1	ND	ug/L	4.0	0.72	
<b>QC Batch ID: BZG1718</b>						
Dissolved Calcium	BZG1718-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BZG1718-BLK1	ND	mg/L	0.050	0.019	
<b>Dissolved Sodium</b>	<b>BZG1718-BLK1</b>	<b>0.064942</b>	<b>mg/L</b>	<b>0.50</b>	<b>0.051</b>	<b>J</b>
Dissolved Potassium	BZG1718-BLK1	ND	mg/L	1.0	0.10	

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Reported: 07/27/2016 9:33  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG0886</b>									
Chloride	BZG0886-BS1	LCS	52.434	50.000	mg/L	105		90 - 110	
Nitrate as N	BZG0886-BS1	LCS	5.1670	5.0000	mg/L	103		90 - 110	
Sulfate	BZG0886-BS1	LCS	103.97	100.00	mg/L	104		90 - 110	
<b>QC Batch ID: BZG0967</b>									
MBAS	BZG0967-BS1	LCS	0.20560	0.20000	mg/L	103		85 - 115	
<b>QC Batch ID: BZG1043</b>									
Total Alkalinity as CaCO <sub>3</sub>	BZG1043-BS3	LCS	105.12	100.00	mg/L	105		90 - 110	
<b>QC Batch ID: BZG1233</b>									
Total Dissolved Solids @ 180 C	BZG1233-BS1	LCS	575.00	586.00	mg/L	98.1		90 - 110	
<b>QC Batch ID: BZG1551</b>									
Perchlorate	BZG1551-BS1	LCS	9.7426	10.000	ug/L	97.4		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Calcium	BZG1718-BS1	LCS	11.040	10.000	mg/L	110		85 - 115	
Dissolved Magnesium	BZG1718-BS1	LCS	10.243	10.000	mg/L	102		85 - 115	
Dissolved Sodium	BZG1718-BS1	LCS	10.763	10.000	mg/L	108		85 - 115	
Dissolved Potassium	BZG1718-BS1	LCS	10.315	10.000	mg/L	103		85 - 115	

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Reported: 07/27/2016 9:33  
Project: Rialto Perchlorate Investigator  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	RPD	Percent Recovery
<b>QC Batch ID: BZG0886</b>		Used client sample: Y - Description: N15-4, 07/11/2016 16:05								
Chloride	DUP	1619003-01	3.3100	3.2630		mg/L	1.4		10	
	MS	1619003-01	3.3100	53.288	50.505	mg/L		99.0		80 - 120
	MSD	1619003-01	3.3100	53.012	50.505	mg/L	0.5	98.4	10	80 - 120
Nitrate as N	DUP	1619003-01	1.3180	1.3000		mg/L	1.4		10	
	MS	1619003-01	1.3180	6.1172	5.0505	mg/L		95.0		80 - 120
	MSD	1619003-01	1.3180	6.1020	5.0505	mg/L	0.2	94.7	10	80 - 120
Sulfate	DUP	1619003-01	13.686	13.462		mg/L	1.7		10	
	MS	1619003-01	13.686	113.24	101.01	mg/L		98.6		80 - 120
	MSD	1619003-01	13.686	113.07	101.01	mg/L	0.1	98.4	10	80 - 120
<b>QC Batch ID: BZG0967</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
MBAS	DUP	1619000-01	ND	ND		mg/L			20	
	MS	1619000-01	ND	0.41640	0.40000	mg/L		104		80 - 120
	MSD	1619000-01	ND	0.42660	0.40000	mg/L	2.4	107	20	80 - 120
<b>QC Batch ID: BZG1043</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Hydroxide	DUP	1619000-01	ND	ND		mg/L			10	
Total Alkalinity as CaCO3	DUP	1619000-01	166.59	164.00		mg/L	1.6		10	
<b>QC Batch ID: BZG1233</b>		Used client sample: N								
Total Dissolved Solids @ 180 C	DUP	1618778-06	505.00	495.00		mg/L	2.0		10	
<b>QC Batch ID: BZG1551</b>		Used client sample: N								
Perchlorate	DUP	1619078-01	1.1789	1.1099		ug/L	6.0		15	J
	MS	1619078-01	1.1789	9.8170	10.101	ug/L		85.5		80 - 120
	MSD	1619078-01	1.1789	9.4746	10.101	ug/L	3.5	82.1	15	80 - 120
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Calcium	DUP	1619000-01	66.062	64.528		mg/L	2.3		20	
	MS	1619000-01	66.062	72.914	10.204	mg/L		67.1		75 - 125
	MSD	1619000-01	66.062	72.796	10.204	mg/L	0.2	66.0	20	75 - 125
Dissolved Magnesium	DUP	1619000-01	9.1115	9.2802		mg/L	1.8		20	
	MS	1619000-01	9.1115	19.300	10.204	mg/L		99.8		75 - 125
	MSD	1619000-01	9.1115	18.724	10.204	mg/L	3.0	94.2	20	75 - 125
Dissolved Sodium	DUP	1619000-01	13.160	13.094		mg/L	0.5		20	
	MS	1619000-01	13.160	23.401	10.204	mg/L		100		75 - 125
	MSD	1619000-01	13.160	22.818	10.204	mg/L	2.5	94.6	20	75 - 125
Dissolved Potassium	DUP	1619000-01	3.2973	3.3530		mg/L	1.7		20	
	MS	1619000-01	3.2973	13.671	10.204	mg/L		102		75 - 125
	MSD	1619000-01	3.2973	13.012	10.204	mg/L	4.9	95.2	20	75 - 125

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**Reported:** 07/27/2016 9:33  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1230</b>						
Dissolved Mercury	BZG1230-BLK1	ND	ug/L	0.20	0.030	
<b>QC Batch ID: BZG1718</b>						
Dissolved Antimony	BZG1718-BLK3	ND	ug/L	100	4.9	
Dissolved Arsenic	BZG1718-BLK1	ND	ug/L	50	9.2	
Dissolved Barium	BZG1718-BLK1	ND	ug/L	10	3.5	
Dissolved Beryllium	BZG1718-BLK1	ND	ug/L	10	0.50	
Dissolved Cadmium	BZG1718-BLK1	ND	ug/L	10	1.1	
Dissolved Chromium	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Cobalt	BZG1718-BLK1	ND	ug/L	50	1.1	
Dissolved Copper	BZG1718-BLK1	ND	ug/L	10	1.0	
Dissolved Lead	BZG1718-BLK1	ND	ug/L	50	3.5	
Dissolved Molybdenum	BZG1718-BLK1	ND	ug/L	50	1.4	
Dissolved Nickel	BZG1718-BLK1	ND	ug/L	10	2.4	
Dissolved Selenium	BZG1718-BLK2	ND	ug/L	100	15	
Dissolved Silver	BZG1718-BLK1	ND	ug/L	10	1.2	
Dissolved Thallium	BZG1718-BLK1	ND	ug/L	100	10	
Dissolved Vanadium	BZG1718-BLK1	ND	ug/L	10	2.2	
Dissolved Zinc	BZG1718-BLK1	ND	ug/L	10	5.0	

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Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigator

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1230</b>									
Dissolved Mercury	BZG1230-BS1	LCS	0.99250	1.0000	ug/L	99.2		85 - 115	
<b>QC Batch ID: BZG1718</b>									
Dissolved Antimony	BZG1718-BS3	LCS	392.92	400.00	ug/L	98.2		85 - 115	
Dissolved Arsenic	BZG1718-BS1	LCS	191.58	200.00	ug/L	95.8		85 - 115	
Dissolved Barium	BZG1718-BS1	LCS	426.39	400.00	ug/L	107		85 - 115	
Dissolved Beryllium	BZG1718-BS1	LCS	196.37	200.00	ug/L	98.2		85 - 115	
Dissolved Cadmium	BZG1718-BS1	LCS	190.60	200.00	ug/L	95.3		85 - 115	
Dissolved Chromium	BZG1718-BS1	LCS	202.76	200.00	ug/L	101		85 - 115	
Dissolved Cobalt	BZG1718-BS1	LCS	212.53	200.00	ug/L	106		85 - 115	
Dissolved Copper	BZG1718-BS1	LCS	407.78	400.00	ug/L	102		85 - 115	
Dissolved Lead	BZG1718-BS1	LCS	433.22	400.00	ug/L	108		85 - 115	
Dissolved Molybdenum	BZG1718-BS1	LCS	219.69	200.00	ug/L	110		85 - 115	
Dissolved Nickel	BZG1718-BS1	LCS	417.27	400.00	ug/L	104		85 - 115	
Dissolved Selenium	BZG1718-BS2	LCS	190.81	200.00	ug/L	95.4		85 - 115	
Dissolved Silver	BZG1718-BS1	LCS	96.982	100.00	ug/L	97.0		85 - 115	
Dissolved Thallium	BZG1718-BS1	LCS	452.28	400.00	ug/L	113		85 - 115	
Dissolved Vanadium	BZG1718-BS1	LCS	210.65	200.00	ug/L	105		85 - 115	
Dissolved Zinc	BZG1718-BS1	LCS	467.11	500.00	ug/L	93.4		85 - 115	

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Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigatiton

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1230</b>			Used client sample: N							
Dissolved Mercury	DUP	1619297-01	ND	ND		ug/L		20		
	MS	1619297-01	ND	1.0675	1.0000	ug/L		107	70 - 130	
	MSD	1619297-01	ND	1.0175	1.0000	ug/L	4.8	102	20	70 - 130
<b>QC Batch ID: BZG1718</b>			Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25							
Dissolved Antimony	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	683.99	816.33	ug/L		83.8	75 - 125	
	MSD	1619000-01	ND	683.57	816.33	ug/L	0.1	83.7	20	75 - 125
Dissolved Arsenic	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	192.74	204.08	ug/L		94.4	75 - 125	
	MSD	1619000-01	ND	193.05	204.08	ug/L	0.2	94.6	20	75 - 125
Dissolved Barium	DUP	1619000-01	27.007	28.392		ug/L	5.0	20		
	MS	1619000-01	27.007	464.00	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	27.007	452.87	408.16	ug/L	2.4	104	20	75 - 125
Dissolved Beryllium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	207.46	204.08	ug/L		102	75 - 125	
	MSD	1619000-01	ND	202.14	204.08	ug/L	2.6	99.0	20	75 - 125
Dissolved Cadmium	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	214.64	204.08	ug/L		105	75 - 125	
	MSD	1619000-01	ND	208.71	204.08	ug/L	2.8	102	20	75 - 125
Dissolved Chromium	DUP	1619000-01	2.8866	2.5637		ug/L	11.8	20		J
	MS	1619000-01	2.8866	206.10	204.08	ug/L		99.6	75 - 125	
	MSD	1619000-01	2.8866	201.87	204.08	ug/L	2.1	97.5	20	75 - 125
Dissolved Cobalt	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	210.09	204.08	ug/L		103	75 - 125	
	MSD	1619000-01	ND	204.75	204.08	ug/L	2.6	100	20	75 - 125
Dissolved Copper	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	393.85	408.16	ug/L		96.5	75 - 125	
	MSD	1619000-01	ND	394.42	408.16	ug/L	0.1	96.6	20	75 - 125
Dissolved Lead	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	438.45	408.16	ug/L		107	75 - 125	
	MSD	1619000-01	ND	424.70	408.16	ug/L	3.2	104	20	75 - 125
Dissolved Molybdenum	DUP	1619000-01	2.6371	2.6599		ug/L	0.9	20		J
	MS	1619000-01	2.6371	204.69	204.08	ug/L		99.0	75 - 125	
	MSD	1619000-01	2.6371	202.27	204.08	ug/L	1.2	97.8	20	75 - 125
Dissolved Nickel	DUP	1619000-01	ND	ND		ug/L		20		
	MS	1619000-01	ND	415.15	408.16	ug/L		102	75 - 125	
	MSD	1619000-01	ND	410.58	408.16	ug/L	1.1	101	20	75 - 125

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:33

Project: Rialto Perchlorate Investigator

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1718</b>		Used client sample: Y - Description: M-1 Deep (3610038-700), 07/11/2016 13:25								
Dissolved Selenium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	247.94	204.08	ug/L		121		75 - 125
	MSD	1619000-01	ND	246.47	204.08	ug/L	0.6	121	20	75 - 125
Dissolved Silver	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	97.719	102.04	ug/L		95.8		75 - 125
	MSD	1619000-01	ND	96.062	102.04	ug/L	1.7	94.1	20	75 - 125
Dissolved Thallium	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	465.08	408.16	ug/L		114		75 - 125
	MSD	1619000-01	ND	451.43	408.16	ug/L	3.0	111	20	75 - 125
Dissolved Vanadium	DUP	1619000-01	ND	2.3483		ug/L			20	J
	MS	1619000-01	ND	212.18	204.08	ug/L		104		75 - 125
	MSD	1619000-01	ND	207.85	204.08	ug/L	2.1	102	20	75 - 125
Dissolved Zinc	DUP	1619000-01	ND	ND		ug/L			20	
	MS	1619000-01	ND	509.68	510.20	ug/L		99.9		75 - 125
	MSD	1619000-01	ND	493.49	510.20	ug/L	3.2	96.7	20	75 - 125



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:33

Project: Rialto Perchlorate Investigatlon

Project Number: 2013.0100/2A

Project Manager: Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A03	The sample concentration is more than 4 times the spike level.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/22/2016

Ralph Murphy

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619387  
Invoice ID: B241128

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

## Chain of Custody and Cooler Receipt Form for 1619387 Page 1 of 2

## BC Laboratories, Inc.

## Chain of Custody

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911

## Report To:

## Analysis Requested

Name	Geologic Associates	Phone	909-626-2282
Address	1831 Commercenter East	Project	Rialto
City	San Bernardino	Project #	2G13-C100
State/CA Zip	92408	Samplers Name(s)	B. S. Jones
Attn:	Ralph Murphy	WO #:	
Lab #	16-19387	Date Sampled	
		Time Sampled	
		Matrix	
1			
2			
3	M-3 Port 1 (3610038-34)	7-11-16	11:35 AM
4	M-3 Port 2 (3610038-35)		1:00
5	M-3 Port 3 (3610038-36)		10:30
6	M-3 Port 4 (3610038-37)		10:05
7	M-3 Port 5 3610038-38)		09:32
8	M-3 Port 6 (3610038-39)		09:05
9	M-3 Port 7 (3610038-40)		08:30
10	QCAB	Lab O.I.	
11	QCCTB	Lab O.T.	
12			

## Samples need EDT

Relinquished by: (Signature) Zachary Clegg	Date & Time: 7-11-16 1700
Relinquished by: (Signature) John H. Wright	Date & Time: 7-11-16 1705
Relinquished by: (Signature) John H. Wright	Date & Time: 7-11-16 1730
Relinquished by: (Signature) John H. Wright	Date & Time: 7-12-16 1730

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## Chain of Custody and Cooler Receipt Form for 1619387 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Page	Of					
Submission #: 1619387										
SHIPPING INFORMATION		SHIPPING CONTAINER		FREE LIQUID						
Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify)		Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify)		YES <input type="checkbox"/> NO <input type="checkbox"/> W / S						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments:								
Custody Seals	Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
<input checked="" type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.97 Container: PE Thermometer ID: 208 Temperature: (A) 3.3 °C / (C) 3.4 °C		Date/Time ARL 7.12 Analyst Init ARL 1800							
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
OT PE UNPRES	0	0	0	0	0	0	0			
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6</sup>										
OT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	PBC	AFC	AFC	AFC	AFC	AFC	AFC	AFC	AFC	
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: _____	N Date/Time: 7-14-16 10:10 Rev 21 05/23/2016									
Sample Numbering Completed By: _____	S:\WPDoc\WordPerfect\Lab_Docs\Forms\ISAMRECRev 20									
A = Actual / C = Corrected										

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619387-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 1 (3610038-34) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 11:35 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 2 (3610038-35) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 11:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 3 (3610038-36) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 10:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 4 (3610038-37) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 10:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 5 (3610038-38) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 09:32 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 6 (3610038-39) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 09:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619387-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-3 Port 7 (3610038-40) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619387-08	<b>COC Number:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30	<b>Sampling Date:</b> 07/11/2016 00:00	
	<b>Project Number:</b> ---	<b>Sample Depth:</b> ---	<b>Lab Matrix:</b> Water	
	<b>Sampling Location:</b> ---	<b>Sample Type:</b> Water		
	<b>Sampling Point:</b> QCAB			
	<b>Sampled By:</b> ---			
1619387-09	<b>COC Number:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30	<b>Sampling Date:</b> 07/11/2016 00:00	
	<b>Project Number:</b> ---	<b>Sample Depth:</b> ---	<b>Lab Matrix:</b> Water	
	<b>Sampling Location:</b> ---	<b>Sample Type:</b> Blank Water		
	<b>Sampling Point:</b> QCTB			
	<b>Sampled By:</b> ---			

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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-01	Client Sample Name: M-3 Port 1 (3610038-34), 7/11/2016 11:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.69</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.49</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	J	1
<b>cis-1,2-Dichloroethene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-01	Client Sample Name: M-3 Port 1 (3610038-34), 7/11/2016 11:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-01	Client Sample Name: M-3 Port 1 (3610038-34), 7/11/2016 11:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 12:39	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-01	Client Sample Name: M-3 Port 1 (3610038-34), 7/11/2016 11:35:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	32	ug/L	20	3.6	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 03:32	OLH	IC6	5	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-02	Client Sample Name: M-3 Port 2 (3610038-35), 7/11/2016 11:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-02	Client Sample Name: M-3 Port 2 (3610038-35), 7/11/2016 11:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-02	Client Sample Name: M-3 Port 2 (3610038-35), 7/11/2016 11:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 13:02	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-02	Client Sample Name: M-3 Port 2 (3610038-35), 7/11/2016 11:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	43	ug/L	20	3.6	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 11:26	EMW	IC6	5	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-03	Client Sample Name: M-3 Port 3 (3610038-36), 7/11/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.95</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.32</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-03	Client Sample Name: M-3 Port 3 (3610038-36), 7/11/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-03	Client Sample Name: M-3 Port 3 (3610038-36), 7/11/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Diethyl ether</b>	<b>0.11</b>	<b>ug/L</b>			<b>EPA-524.2</b>			<b>1</b>

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/15/16	07/15/16	13:25	JMS	MS-V14	1	BZG1054



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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-03	Client Sample Name: M-3 Port 3 (3610038-36), 7/11/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	38	ug/L	20	3.6	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 11:54	EMW	IC6	5	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-04	Client Sample Name: M-3 Port 4 (3610038-37), 7/11/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.89</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-04	Client Sample Name:	M-3 Port 4 (3610038-37), 7/11/2016 10:05:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>28</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-04	Client Sample Name: M-3 Port 4 (3610038-37), 7/11/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 13:48	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-04	Client Sample Name: M-3 Port 4 (3610038-37), 7/11/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	38	ug/L	8.0	1.4	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 12:07	EMW	IC6	2	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-05	Client Sample Name: M-3 Port 5 (3610038-38), 7/11/2016 9:32:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.72</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.85</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.65</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-05	Client Sample Name: M-3 Port 5 (3610038-38), 7/11/2016 9:32:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-05	Client Sample Name: M-3 Port 5 (3610038-38), 7/11/2016 9:32:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 14:11	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-05	Client Sample Name: M-3 Port 5 (3610038-38), 7/11/2016 9:32:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	28	ug/L	8.0	1.4	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 12:35	EMW	IC6	2	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-06	Client Sample Name: M-3 Port 6 (3610038-39), 7/11/2016 9:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.84</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.85</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.099</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.89</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-06	Client Sample Name: M-3 Port 6 (3610038-39), 7/11/2016 9:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-06	Client Sample Name: M-3 Port 6 (3610038-39), 7/11/2016 9:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 14:34	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-06	Client Sample Name: M-3 Port 6 (3610038-39), 7/11/2016 9:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	40	ug/L	20	3.6	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/16	07/20/16 13:17	EMW	IC6	5		BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-07	Client Sample Name: M-3 Port 7 (3610038-40), 7/11/2016 8:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-07	Client Sample Name: M-3 Port 7 (3610038-40), 7/11/2016 8:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-07	Client Sample Name: M-3 Port 7 (3610038-40), 7/11/2016 8:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 09:58	JMS	MS-V14	1	BZG1054

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Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619387-07	Client Sample Name: M-3 Port 7 (3610038-40), 7/11/2016 8:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.0	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/19/16	07/20/16 00:46	OLH	IC6	1	BZG1562

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-08	Client Sample Name:	QCAB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-08	Client Sample Name:	QCAB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-08	Client Sample Name:	QCAB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 14:57	JMS	MS-V14	1	BZG1054

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-09	Client Sample Name:	QCTB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-09	Client Sample Name:	QCTB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619387-09	Client Sample Name:	QCTB, 7/11/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 12:16	JMS	MS-V14	1	BZG1054

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Ontario, CA 91761

Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1054</b>						
Benzene	BZG1054-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1054-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1054-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1054-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1054-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1054-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1054-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1054-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1054-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1054-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1054-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1054-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1054-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1054-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1054-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1054-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1054-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1054-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1054-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1054-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1054-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1054-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1054-BLK1	ND	ug/L	0.50	0.14	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1054</b>						
trans-1,3-Dichloropropene	BZG1054-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1054-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1054-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1054-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1054-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1054-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1054-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1054-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1054-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1054-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1054-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1054-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1054-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1054-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1054-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1054-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1054-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1054-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1054-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1054-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1054-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1054-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1054-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1054-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1054-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1054-BLK1	ND	ug/L	0.50	0.18	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1054</b>						
2-Hexanone	BZG1054-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1054-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1054-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1054-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1054-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1054-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1054-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1054-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1054-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1054-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1054-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1054-BLK1	93.0	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1054-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1054-BLK1	96.1	%	80 - 120 (LCL - UCL)		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1054</b>									
Benzene	BZG1054-BS1	LCS	23.864	25.000	ug/L	95.5		70 - 130	
Bromodichloromethane	BZG1054-BS1	LCS	22.077	25.000	ug/L	88.3		70 - 130	
Chlorobenzene	BZG1054-BS1	LCS	23.335	25.000	ug/L	93.3		70 - 130	
Chloroethane	BZG1054-BS1	LCS	24.406	25.000	ug/L	97.6		70 - 130	
1,4-Dichlorobenzene	BZG1054-BS1	LCS	22.715	25.000	ug/L	90.9		70 - 130	
1,1-Dichloroethane	BZG1054-BS1	LCS	24.536	25.000	ug/L	98.1		70 - 130	
1,1-Dichloroethene	BZG1054-BS1	LCS	24.804	25.000	ug/L	99.2		70 - 130	
Toluene	BZG1054-BS1	LCS	23.704	25.000	ug/L	94.8		70 - 130	
Trichloroethene	BZG1054-BS1	LCS	24.456	25.000	ug/L	97.8		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1054-BS1	LCS	9.8400	10.000	ug/L	98.4		75 - 125	
Toluene-d8 (Surrogate)	BZG1054-BS1	LCS	10.120	10.000	ug/L	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1054-BS1	LCS	9.7800	10.000	ug/L	97.8		80 - 120	

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Ontario, CA 91761

Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1054</b>		Used client sample: Y - Description: M-3 Port 7 (3610038-40), 07/11/2016 08:30									
Benzene	MS	1619387-07	ND	26.941	25.000	ug/L		108		70 - 130	
	MSD	1619387-07	ND	23.649	25.000	ug/L	13.0	94.6	20	70 - 130	
Bromodichloromethane	MS	1619387-07	ND	24.163	25.000	ug/L		96.7		70 - 130	
	MSD	1619387-07	ND	21.895	25.000	ug/L	9.8	87.6	20	70 - 130	
Chlorobenzene	MS	1619387-07	ND	27.006	25.000	ug/L		108		70 - 130	
	MSD	1619387-07	ND	23.580	25.000	ug/L	13.5	94.3	20	70 - 130	
Chloroethane	MS	1619387-07	ND	28.588	25.000	ug/L		114		70 - 130	
	MSD	1619387-07	ND	24.822	25.000	ug/L	14.1	99.3	20	70 - 130	
1,4-Dichlorobenzene	MS	1619387-07	ND	26.419	25.000	ug/L		106		70 - 130	
	MSD	1619387-07	ND	22.908	25.000	ug/L	14.2	91.6	20	70 - 130	
1,1-Dichloroethane	MS	1619387-07	ND	27.857	25.000	ug/L		111		70 - 130	
	MSD	1619387-07	ND	24.658	25.000	ug/L	12.2	98.6	20	70 - 130	
1,1-Dichloroethene	MS	1619387-07	ND	28.110	25.000	ug/L		112		70 - 130	
	MSD	1619387-07	ND	24.878	25.000	ug/L	12.2	99.5	20	70 - 130	
Toluene	MS	1619387-07	ND	26.355	25.000	ug/L		105		70 - 130	
	MSD	1619387-07	ND	23.274	25.000	ug/L	12.4	93.1	20	70 - 130	
Trichloroethene	MS	1619387-07	1.1110	27.951	25.000	ug/L		107		70 - 130	
	MSD	1619387-07	1.1110	24.734	25.000	ug/L	12.2	94.5	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1619387-07	ND	9.5300	10.000	ug/L		95.3		75 - 125	
	MSD	1619387-07	ND	9.5400	10.000	ug/L	0.1	95.4		75 - 125	
Toluene-d8 (Surrogate)	MS	1619387-07	ND	9.9700	10.000	ug/L		99.7		80 - 120	
	MSD	1619387-07	ND	9.9300	10.000	ug/L	0.4	99.3		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1619387-07	ND	9.6100	10.000	ug/L		96.1		80 - 120	
	MSD	1619387-07	ND	9.9000	10.000	ug/L	3.0	99.0		80 - 120	

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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1562</b>						
Perchlorate	BZG1562-BLK1	ND	ug/L	4.0	0.72	



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/22/2016 10:22  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
Perchlorate	BZG1562-BS1	LCS	9.7418	10.000	ug/L	97.4		85 - 115	



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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1562</b>		Used client sample: Y - Description: M-3 Port 1 (3610038-34), 07/11/2016 11:35									
Perchlorate	DUP	619387-01RE'	32.248	31.346		ug/L	2.8		15		
	MS	619387-01RE'	32.248	79.861	50.505	ug/L		94.3		80 - 120	
	MSD	619387-01RE'	32.248	81.621	50.505	ug/L	2.2	97.8	15	80 - 120	



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Ontario, CA 91761

**Reported:** 07/22/2016 10:22  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619388  
Invoice ID: B241485

Enclosed are the results of analyses for samples received by the laboratory on 7/12/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911

## Analysis Requested

## Report To:

Name	Geologic Associates	Phone:	969-626-2282
Address:	1831 Commercenter East	Project:	Rialto
City:	San Bernardino	Project #	2013-0100
State/CA Zip:	92408	Samplers Name:	S. C. Campbell
Attn:	Ralph Murphy	WO #:	
Lab #	1619388	Date Sampled	Time Sampled
			Matrix

- 1	M6-6 Port 1 (3610038-711)	7-11-16	15:55	C. W.
- 2	M6-6 Port 2 (3610038-712)		15:18	X
- 3	M6-6 Port 3 (3610038-713)		14:48	X
- 4	M6-6 Port 4 (3610038-714)		14:18	X
- 5	M6-6 Port 5 (3610038-715)		13:48	X
- 6	M6-6 Port 6 (3610038-716)		13:18	X
- 7	M6-6 Port 7 (3610038-717)		12:33	X
- 8	N-14 Shallow (3610038-7-0)			
- 9	N-14 Deep (3610038-7-0)			
10				
11				
12				

## Samples need EDT

Relinquished by: (Signature) <i>John Murphy</i>	Date & Time: 7-11-16 11:00
Relinquished by: (Signature) <i>John Murphy</i>	Date & Time: 7-11-16 15:45
Relinquished by: (Signature) <i>John Murphy</i>	Date & Time: 7-12-16 17:30

CHK BY	DISTRIBUTION	SUB-OUT
<i>John Murphy</i>		



## Chain of Custody and Cooler Receipt Form for 1619388 Page 2 of 2

COOLER RECEIPT FORM										Page <u>1</u>	
BC LABORATORIES INC.		Submission #: <u>1619388</u>		SHIPPING INFORMATION		SHIPPING CONTAINER		FREE LIQUID			
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>	<u>W</u> / S		
BC Lab Field Service <input checked="" type="checkbox"/>		Other <input type="checkbox"/> (Specify) _____		Other <input type="checkbox"/> (Specify) _____							
Refrigerant:	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	None <input type="checkbox"/>	Other <input type="checkbox"/>	Comments:						
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input type="checkbox"/>		Comments:						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.97</u>	Container: <u>PE</u>	Thermometer ID: <u>.208</u>	Date/Time <u>ARL 7-12</u>							
	Temperature: (A) <u>3.3</u> °C / (C) <u>3.4</u> °C			Analyst Init <u>ARL</u> 1800							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES	C	C	0	0	D	D	D				
2oz Cr <sup>16</sup>											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PIA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK	PB	AB	ABC	MSC	ABC	ABC	MSC				
40ml VOA VIAL											
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: _____	Date/Time: <u>7-14-16 10:10</u>									Rev 21 05/23/2016	
Sample Numbering Completed By: _____										ISAWPDocWordPerfectLAB_DOCSFORMSISAMRECRev 201	
Corrected _____											

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619388-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 1 (3610038-711) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 15:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 2 (3610038-712) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 15:18 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 3 (3610038-713) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 14:48 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 4 (3610038-714) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 14:18 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 5 (3610038-715) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 13:48 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 6 (3610038-716) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 13:18 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619388-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-6-6 Port 7 (3610038-717) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/12/2016 17:30 <b>Sampling Date:</b> 07/11/2016 12:33 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-01	Client Sample Name: M-6-6 Port 1 (3610038-711), 7/11/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-01	Client Sample Name: M-6-6 Port 1 (3610038-711), 7/11/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>2.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-01	Client Sample Name: M-6-6 Port 1 (3610038-711), 7/11/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 18:00	JMS	MS-V14	1	BZG1193

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-01	Client Sample Name: M-6-6 Port 1 (3610038-711), 7/11/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.7	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/20/16	07/20/16 23:02	JSW	IC6	1	BZG1806

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-02	Client Sample Name: M-6-6 Port 2 (3610038-712), 7/11/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-02	Client Sample Name: M-6-6 Port 2 (3610038-712), 7/11/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-02	Client Sample Name: M-6-6 Port 2 (3610038-712), 7/11/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 17:37	JMS	MS-V14	1	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-02	Client Sample Name: M-6-6 Port 2 (3610038-712), 7/11/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	11	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/20/16	07/20/16 23:58	OLH	IC6	1		BZG1806

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-03	Client Sample Name: M-6-6 Port 3 (3610038-713), 7/11/2016 2:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.32</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.31</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-03	Client Sample Name: M-6-6 Port 3 (3610038-713), 7/11/2016 2:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.65</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>7.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-03	Client Sample Name: M-6-6 Port 3 (3610038-713), 7/11/2016 2:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 17:14	JMS	MS-V14	1	BZG1193

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Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-03	Client Sample Name: M-6-6 Port 3 (3610038-713), 7/11/2016 2:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	18	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/20/16	07/21/16 00:12	OLH	IC6	1		BZG1806

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-04	Client Sample Name: M-6-6 Port 4 (3610038-714), 7/11/2016 2:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-04	Client Sample Name:	M-6-6 Port 4 (3610038-714), 7/11/2016 2:18:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-04	Client Sample Name: M-6-6 Port 4 (3610038-714), 7/11/2016 2:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 16:51	JMS	MS-V14	1	BZG1193

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Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-04	Client Sample Name: M-6-6 Port 4 (3610038-714), 7/11/2016 2:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/20/16	07/21/16 00:53	OLH	IC6	1		BZG1806

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-05	Client Sample Name: M-6-6 Port 5 (3610038-715), 7/11/2016 1:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-05	Client Sample Name:	M-6-6 Port 5 (3610038-715), 7/11/2016 1:48:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-05	Client Sample Name: M-6-6 Port 5 (3610038-715), 7/11/2016 1:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 16:28	JMS	MS-V14	1	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-05	Client Sample Name: M-6-6 Port 5 (3610038-715), 7/11/2016 1:48:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/20/16	07/21/16 01:07	OLH	IC6	1		BZG1806

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-06	Client Sample Name: M-6-6 Port 6 (3610038-716), 7/11/2016 1:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-06	Client Sample Name: M-6-6 Port 6 (3610038-716), 7/11/2016 1:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-06	Client Sample Name: M-6-6 Port 6 (3610038-716), 7/11/2016 1:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 16:06	JMS	MS-V14	1	BZG1193

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Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-06	Client Sample Name: M-6-6 Port 6 (3610038-716), 7/11/2016 1:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/20/16	07/21/16 01:21	OLH	IC6	1		BZG1806

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-07	Client Sample Name: M-6-6 Port 7 (3610038-717), 7/11/2016 12:33:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-07	Client Sample Name: M-6-6 Port 7 (3610038-717), 7/11/2016 12:33:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619388-07	Client Sample Name: M-6-6 Port 7 (3610038-717), 7/11/2016 12:33:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/15/16 15:43	JMS	MS-V14	1	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 9:07  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619388-07	Client Sample Name: M-6-6 Port 7 (3610038-717), 7/11/2016 12:33:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/20/16	07/21/16 01:35	OLH	IC6	1		BZG1806

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
Benzene	BZG1193-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1193-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1193-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1193-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1193-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1193-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1193-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1193-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1193-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.14	

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
trans-1,3-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1193-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1193-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1193-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1193-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1193-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1193-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1193-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1193-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1193-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1193-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1193-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1193-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1193-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.18	

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Ontario, CA 91761

**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
2-Hexanone	BZG1193-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1193-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1193-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1193-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1193-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1193-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1193-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1193-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1193-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1193-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1193-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1193-BLK1	97.4	%	<b>75 - 125 (LCL - UCL)</b>		
Toluene-d8 (Surrogate)	BZG1193-BLK1	102	%	<b>80 - 120 (LCL - UCL)</b>		
4-Bromofluorobenzene (Surrogate)	BZG1193-BLK1	93.9	%	<b>80 - 120 (LCL - UCL)</b>		

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1193</b>									
Benzene	BZG1193-BS1	LCS	26.405	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BZG1193-BS1	LCS	24.468	25.000	ug/L	97.9		70 - 130	
Chlorobenzene	BZG1193-BS1	LCS	26.812	25.000	ug/L	107		70 - 130	
Chloroethane	BZG1193-BS1	LCS	27.632	25.000	ug/L	111		70 - 130	
1,4-Dichlorobenzene	BZG1193-BS1	LCS	25.763	25.000	ug/L	103		70 - 130	
1,1-Dichloroethane	BZG1193-BS1	LCS	27.489	25.000	ug/L	110		70 - 130	
1,1-Dichloroethene	BZG1193-BS1	LCS	27.304	25.000	ug/L	109		70 - 130	
Toluene	BZG1193-BS1	LCS	25.812	25.000	ug/L	103		70 - 130	
Trichloroethene	BZG1193-BS1	LCS	26.685	25.000	ug/L	107		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1193-BS1	LCS	9.8500	10.000	ug/L	98.5		75 - 125	
Toluene-d8 (Surrogate)	BZG1193-BS1	LCS	9.8600	10.000	ug/L	98.6		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1193-BS1	LCS	9.5900	10.000	ug/L	95.9		80 - 120	

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1193</b>		Used client sample: Y - Description: M-6-6 Port 7 (3610038-717), 07/11/2016 12:33								
Benzene	MS	1619388-07	ND	23.803	25.000	ug/L		95.2		70 - 130
	MSD	1619388-07	ND	23.799	25.000	ug/L	0.0	95.2	20	70 - 130
Bromodichloromethane	MS	1619388-07	ND	21.665	25.000	ug/L		86.7		70 - 130
	MSD	1619388-07	ND	21.907	25.000	ug/L	1.1	87.6	20	70 - 130
Chlorobenzene	MS	1619388-07	ND	23.516	25.000	ug/L		94.1		70 - 130
	MSD	1619388-07	ND	22.768	25.000	ug/L	3.2	91.1	20	70 - 130
Chloroethane	MS	1619388-07	ND	24.647	25.000	ug/L		98.6		70 - 130
	MSD	1619388-07	ND	25.094	25.000	ug/L	1.8	100	20	70 - 130
1,4-Dichlorobenzene	MS	1619388-07	ND	22.990	25.000	ug/L		92.0		70 - 130
	MSD	1619388-07	ND	22.366	25.000	ug/L	2.8	89.5	20	70 - 130
1,1-Dichloroethane	MS	1619388-07	ND	24.606	25.000	ug/L		98.4		70 - 130
	MSD	1619388-07	ND	24.764	25.000	ug/L	0.6	99.1	20	70 - 130
1,1-Dichloroethene	MS	1619388-07	ND	24.430	25.000	ug/L		97.7		70 - 130
	MSD	1619388-07	ND	24.651	25.000	ug/L	0.9	98.6	20	70 - 130
Toluene	MS	1619388-07	ND	23.157	25.000	ug/L		92.6		70 - 130
	MSD	1619388-07	ND	23.242	25.000	ug/L	0.4	93.0	20	70 - 130
Trichloroethene	MS	1619388-07	ND	23.270	25.000	ug/L		93.1		70 - 130
	MSD	1619388-07	ND	23.422	25.000	ug/L	0.7	93.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619388-07	ND	9.7300	10.000	ug/L		97.3		75 - 125
	MSD	1619388-07	ND	9.8100	10.000	ug/L	0.8	98.1		75 - 125
Toluene-d8 (Surrogate)	MS	1619388-07	ND	9.9600	10.000	ug/L		99.6		80 - 120
	MSD	1619388-07	ND	9.9100	10.000	ug/L	0.5	99.1		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619388-07	ND	9.8000	10.000	ug/L		98.0		80 - 120
	MSD	1619388-07	ND	9.6600	10.000	ug/L	1.4	96.6		80 - 120

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1806</b>						
Perchlorate	BZG1806-BLK1	ND	ug/L	4.0	0.72	



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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BZG1806-BS1	LCS	9.7352	10.000	ug/L	97.4		85 - 115	

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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									Percent RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1806</b>		Used client sample: Y - Description: M-6-6 Port 1 (3610038-711), 07/11/2016 15:50									
Perchlorate	DUP	1619388-01	3.7421	3.7227		ug/L	0.5		15		J
	MS	1619388-01	3.7421	12.707	10.101	ug/L		88.7		80 - 120	
	MSD	1619388-01	3.7421	12.624	10.101	ug/L	0.7	87.9	15	80 - 120	



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**Reported:** 07/27/2016 9:07  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619389  
Invoice ID: B241486

Enclosed are the results of analyses for samples received by the laboratory on 7/13/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody and Cooler Receipt Form for 1619389 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>					
Submission #: <u>16-19389</u>									
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W</u> / S					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:									
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>									
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>208</u>	Date/Time <u>7.13 1740</u>		Analyst Init <u>ARL</u>					
Temperature: (A) <u>0.0</u> °C / (C) <u>0.1</u> °C									
SAMPLE CONTAINERS	SAMPLE NUMBERS								
	1	2	3	4	5	6	7	8	9
QT PE UNPRES <u>802</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>					
4oz / 8oz / 16oz PE UNPRES									
2oz Cr <sup>6+</sup>									
QT INORGANIC CHEMICAL METALS									
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz									
PT CYANIDE									
PT NITROGEN FORMS									
PT TOTAL SULFIDE									
2oz. NITRATE / NITRITE									
PT TOTAL ORGANIC CARBON									
PT CHEMICAL OXYGEN DEMAND									
PTA PHENOLICS									
40ml VOA VIAL TRAVEL BLANK	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>					
40ml VOA VIAL									
QT EPA 1664									
PT ODOR									
RADIOLOGICAL									
BACTERIOLOGICAL									
40 ml VOA VIAL- 504									
QT EPA 508/608/8080									
QT EPA 515.1/8150									
QT EPA 525									
QT EPA 525 TRAVEL BLANK									
40ml EPA 547									
40ml EPA 531.1									
8oz EPA 548									
QT EPA 549									
QT EPA 8015M									
QT EPA 8270									
8oz / 16oz / 32oz AMBER									
8oz / 16oz / 32oz JAR									
SOIL SLEEVE									
PCB VIAL									
PLASTIC BAG									
TEDLAR BAG									
FERROUS IRON									
ENCORE									
SMART KIT									
SUMMA CANISTER									
Comments: _____									
Sample Numbering Completed By: _____	Date/Time: <u>7/14/16 1915</u>								
A = Actual / C = Corrected	Rev 21 05/23/2016 S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMRECRev 20								

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619389-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 4 (3610038-30) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 15:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619389-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 5 (3610038-31) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 15:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619389-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 6 (3610038-32) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 14:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619389-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 7 (3610038-33) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 14:17 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-01	Client Sample Name: M-2 Port 4 (3610038-30), 7/12/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.25</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.11</b>	ug/L	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>2.8</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-01	Client Sample Name: M-2 Port 4 (3610038-30), 7/12/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-01	Client Sample Name: M-2 Port 4 (3610038-30), 7/12/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Diethyl ether</b>	<b>0.40</b>	<b>ug/L</b>			<b>EPA-524.2</b>			<b>1</b>

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/15/16	07/16/16	00:06	JMS	MS-V14	1	BZG1194



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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619389-01	Client Sample Name: M-2 Port 4 (3610038-30), 7/12/2016 3:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	18	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/21/16	07/21/16 13:46	JSW	IC6	1		BZG1823

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-02	Client Sample Name: M-2 Port 5 (3610038-31), 7/12/2016 3:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-02	Client Sample Name:	M-2 Port 5 (3610038-31), 7/12/2016 3:20:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-02	Client Sample Name: M-2 Port 5 (3610038-31), 7/12/2016 3:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 00:29	JMS	MS-V14	1	BZG1194

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Reported: 07/27/2016 9:47  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619389-02	Client Sample Name: M-2 Port 5 (3610038-31), 7/12/2016 3:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	0.83	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 14:42	JSW	IC6	1	BZG1823

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-03	Client Sample Name: M-2 Port 6 (3610038-32), 7/12/2016 2:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-03	Client Sample Name: M-2 Port 6 (3610038-32), 7/12/2016 2:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-03	Client Sample Name: M-2 Port 6 (3610038-32), 7/12/2016 2:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 00:52	JMS	MS-V14	1	BZG1194

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Reported: 07/27/2016 9:47  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619389-03	Client Sample Name: M-2 Port 6 (3610038-32), 7/12/2016 2:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 14:56	JSW	IC6	1	BZG1823

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-04	Client Sample Name: M-2 Port 7 (3610038-33), 7/12/2016 2:17:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 9:47

Project: Rialto Perchlorate - EDT

Project Number: 2013-0100

Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-04	Client Sample Name: M-2 Port 7 (3610038-33), 7/12/2016 2:17:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.74</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619389-04	Client Sample Name: M-2 Port 7 (3610038-33), 7/12/2016 2:17:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 01:15	JMS	MS-V14	1	BZG1194

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Reported: 07/27/2016 9:47  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619389-04	Client Sample Name: M-2 Port 7 (3610038-33), 7/12/2016 2:17:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 15:37	JSW	IC6	1	BZG1823

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**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
Benzene	BZG1194-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1194-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1194-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.14	

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
trans-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1194-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1194-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1194-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1194-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1194-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1194-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1194-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1194-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1194-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1194-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.18	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
2-Hexanone	BZG1194-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1194-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1194-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1194-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1194-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1194-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1194-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1194-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1194-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1194-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1194-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BLK1	97.2	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1194-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1194-BLK1	95.5	%	80 - 120 (LCL - UCL)		

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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1194</b>									
Benzene	BZG1194-BS1	LCS	27.238	25.000	ug/L	109		70 - 130	
Bromodichloromethane	BZG1194-BS1	LCS	24.777	25.000	ug/L	99.1		70 - 130	
Chlorobenzene	BZG1194-BS1	LCS	27.062	25.000	ug/L	108		70 - 130	
Chloroethane	BZG1194-BS1	LCS	28.453	25.000	ug/L	114		70 - 130	
1,4-Dichlorobenzene	BZG1194-BS1	LCS	26.277	25.000	ug/L	105		70 - 130	
1,1-Dichloroethane	BZG1194-BS1	LCS	28.129	25.000	ug/L	113		70 - 130	
1,1-Dichloroethene	BZG1194-BS1	LCS	28.185	25.000	ug/L	113		70 - 130	
Toluene	BZG1194-BS1	LCS	26.363	25.000	ug/L	105		70 - 130	
Trichloroethene	BZG1194-BS1	LCS	27.925	25.000	ug/L	112		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BS1	LCS	10.020	10.000	ug/L	100		75 - 125	
Toluene-d8 (Surrogate)	BZG1194-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1194-BS1	LCS	9.6000	10.000	ug/L	96.0		80 - 120	

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Ontario, CA 91761

Reported: 07/27/2016 9:47  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1194</b>		Used client sample: Y - Description: M-2 Port 4 (3610038-30), 07/12/2016 15:50								
Benzene	MS	1619389-01	ND	23.257	25.000	ug/L		93.0		70 - 130
	MSD	1619389-01	ND	23.199	25.000	ug/L	0.2	92.8	20	70 - 130
Bromodichloromethane	MS	1619389-01	ND	21.449	25.000	ug/L		85.8		70 - 130
	MSD	1619389-01	ND	21.764	25.000	ug/L	1.5	87.1	20	70 - 130
Chlorobenzene	MS	1619389-01	ND	22.926	25.000	ug/L		91.7		70 - 130
	MSD	1619389-01	ND	22.498	25.000	ug/L	1.9	90.0	20	70 - 130
Chloroethane	MS	1619389-01	ND	24.023	25.000	ug/L		96.1		70 - 130
	MSD	1619389-01	ND	24.466	25.000	ug/L	1.8	97.9	20	70 - 130
1,4-Dichlorobenzene	MS	1619389-01	ND	22.191	25.000	ug/L		88.8		70 - 130
	MSD	1619389-01	ND	21.971	25.000	ug/L	1.0	87.9	20	70 - 130
1,1-Dichloroethane	MS	1619389-01	0.25000	24.417	25.000	ug/L		96.7		70 - 130
	MSD	1619389-01	0.25000	24.555	25.000	ug/L	0.6	97.2	20	70 - 130
1,1-Dichloroethene	MS	1619389-01	ND	23.880	25.000	ug/L		95.5		70 - 130
	MSD	1619389-01	ND	24.151	25.000	ug/L	1.1	96.6	20	70 - 130
Toluene	MS	1619389-01	ND	23.011	25.000	ug/L		92.0		70 - 130
	MSD	1619389-01	ND	22.762	25.000	ug/L	1.1	91.0	20	70 - 130
Trichloroethene	MS	1619389-01	1.1410	24.131	25.000	ug/L		92.0		70 - 130
	MSD	1619389-01	1.1410	24.067	25.000	ug/L	0.3	91.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619389-01	ND	9.4100	10.000	ug/L		94.1		75 - 125
	MSD	1619389-01	ND	9.7400	10.000	ug/L	3.4	97.4		75 - 125
Toluene-d8 (Surrogate)	MS	1619389-01	ND	10.030	10.000	ug/L		100		80 - 120
	MSD	1619389-01	ND	9.9300	10.000	ug/L	1.0	99.3		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619389-01	ND	9.8200	10.000	ug/L		98.2		80 - 120
	MSD	1619389-01	ND	9.6800	10.000	ug/L	1.4	96.8		80 - 120

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Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	BZG1823-BLK1	ND	ug/L	4.0	0.72	

**QC Batch ID: BZG1823**



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Ontario, CA 91761

**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BZG1823-BS1	LCS	9.9247	10.000	ug/L	99.2		85 - 115	

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Reported: 07/27/2016 9:47  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1823</b>		Used client sample: Y - Description: M-2 Port 4 (3610038-30), 07/12/2016 15:50								
Perchlorate	DUP	1619389-01	17.949	17.811		ug/L	0.8		15	
	MS	1619389-01	17.949	26.922	10.101	ug/L		88.8		80 - 120
	MSD	1619389-01	17.949	27.208	10.101	ug/L	1.1	91.7	15	80 - 120



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**Reported:** 07/27/2016 9:47  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/27/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013.0100/2A  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619390  
Invoice ID: B241496

Enclosed are the results of analyses for samples received by the laboratory on 7/13/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody Form

Report To:	Geologic Associates		Project #:	2013.0100/2A
Client:	Jason Snapp		Project Name:	Poaltic Desertovate
Attn:				
Street Address:	22777 E Quest Rd.			
City, State, Zip:	Dudley, CA. Phone: 59626228 Fax: 6261233			
Email Address:	le-19300			
Work Order #:	Sample #	Description	Date Sampled	Time Sampled
-1	N8 - 4		7/21/16	13:15
-2	N13 - 2			10:30
-3	N13 - 4			11:55
-4	N16 - B			14:45
-5	N16 - C1			14:15
-6	N16 - C2			13:55
-7	N18 - B			09:27
-8	N18 - C2			09:45
-9	N19 - D			-
-10	OCARS			-
-11	OCTB			-
	OCCEB			
<input checked="" type="checkbox"/> Same as above			EDI Required? Geotracker	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
			Needed 1. Relinq 2. Relinq 3. Relinq	
			Send Copy to State of CA? (EDT)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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## Chain of Custody and Cooler Receipt Form for 1619390 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Page 1 Of 2							
Submission #: 1619390											
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> NV <input checked="" type="checkbox"/> S							
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:											
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:											
Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97 Container: PE Thermometer ID: 208		Date/Time 7.13 1740							
		Temperature: (A) 0.0 °C / (C) 0.1 °C		Analyst Init ARL							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES 8oz		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4oz / 8oz / 16oz PE UNPRES											
2oz Cr <sup>6+</sup>											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PIA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments: \_\_\_\_\_ Date/Time: 7/13/16 1915 Rev 21 05/23/2016

Sample Numbering Completed By: \_\_\_\_\_ (S:\WPDoc\WordPerfect\LAB\DOCS\FORMS\SAMRECRev 20)

A = Actual / C = Corrected



**Chain of Custody and Cooler Receipt Form for 1619390 Page 3 of 3**

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page <u>2</u> Of <u>2</u>			
Submission #: <u>16-19390</u>										
SHIPPING INFORMATION					SHIPPING CONTAINER			FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input checked="" type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	BC Lab Field Service <input checked="" type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Ice Chest <input type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	
								<input checked="" type="checkbox"/> S		
Refrigerant: Ice <input checked="" type="checkbox"/>		Blue Ice <input type="checkbox"/>		None <input type="checkbox"/>		Other <input type="checkbox"/>		Comments: _____		
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>		Comments: _____				
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>		Container: <u>PE</u>		Thermometer ID: <u>208</u>		Date/Time <u>7.13 1740</u>		
		Temperature: (A) <u>0.0</u> °C / (C) <u>0.1</u> °C						Analyst Init <u>ARL</u>		
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>6</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments: _____	Date/Time: <u>14/10 1915</u>									
Sample Numbering Completed By: _____	(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMRECv20)									

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619390-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N8-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 13:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N13-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 10:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N13-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 11:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N16-B <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 14:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N16-C1 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 14:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N16-C2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 13:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N18-B <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 09:27 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619390-08	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N18-C2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 09:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-09	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-Dup <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-10	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCAB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619390-11	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCTB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/13/2016 17:20 <b>Sampling Date:</b> 07/12/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Blank Water		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-01	Client Sample Name:	N8-4, 7/12/2016 1:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.68</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND	J	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-01	Client Sample Name:	N8-4, 7/12/2016 1:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
<b>Methyl t-butyl ether</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-01	Client Sample Name: N8-4, 7/12/2016 1:15:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 04:19	JMS	MS-V14	1	BZG1193

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-01	Client Sample Name: N8-4, 7/12/2016 1:15:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	7.4	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 16:19	JSW	IC6	1	BZG1824

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-02	Client Sample Name:	N13-2, 7/12/2016 10:30:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>5.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-02	Client Sample Name:	N13-2, 7/12/2016 10:30:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.67</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-02	Client Sample Name: N13-2, 7/12/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 04:42	JMS	MS-V14	1	BZG1193

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Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-02	Client Sample Name: N13-2, 7/12/2016 10:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	6.2	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 17:14	JSW	IC6	1	BZG1824

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-03	Client Sample Name:	N13-4, 7/12/2016 11:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.81</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.36</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-03	Client Sample Name:	N13-4, 7/12/2016 11:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.85</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-03	Client Sample Name: N13-4, 7/12/2016 11:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Diethyl ether</b>	<b>0.32</b>	<b>ug/L</b>			<b>EPA-524.2</b>			<b>1</b>

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/15/16	07/16/16	05:05	JMS	MS-V14	1	BZG1193



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Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-03	Client Sample Name: N13-4, 7/12/2016 11:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	110	ug/L	40	7.2	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 19:46	OLH	IC6	10	BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-04	Client Sample Name:	N16-B, 7/12/2016 2:45:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.70</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-04	Client Sample Name:	N16-B, 7/12/2016 2:45:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.47</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>Trichlorofluoromethane</b>	<b>0.38</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-04	Client Sample Name:	N16-B, 7/12/2016 2:45:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 05:28	JMS	MS-V14	1	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-04	Client Sample Name: N16-B, 7/12/2016 2:45:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 17:42	JSW	IC6	1	BZG1824

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-05	Client Sample Name:	N16-C1, 7/12/2016 2:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.40</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.38</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-05	Client Sample Name:	N16-C1, 7/12/2016 2:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
<b>Toluene</b>	<b>1.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-05	Client Sample Name:	N16-C1, 7/12/2016 2:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
<b>Methyl ethyl ketone</b>	<b>3.9</b>	<b>ug/L</b>	<b>10</b>	<b>2.5</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: 2-Ethyl-1-hexanol</b>	<b>1.5</b>	<b>ug/L</b>			<b>EPA-524.2</b>			1
<b>TIC: Isopropyl alcohol</b>	<b>28</b>	<b>ug/L</b>			<b>EPA-524.2</b>			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 05:51	JMS	MS-V14	1	BZG1193



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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-05	Client Sample Name: N16-C1, 7/12/2016 2:15:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.3	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 18:23	JSW	IC6	1	BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-06	Client Sample Name:	N16-C2, 7/12/2016 1:55:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.50</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.44</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	J	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-06	Client Sample Name:	N16-C2, 7/12/2016 1:55:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
<b>Toluene</b>	<b>4.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-06	Client Sample Name:	N16-C2, 7/12/2016 1:55:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: 2-Ethyl-1-hexanol</b>	<b>1.3</b>	<b>ug/L</b>			<b>EPA-524.2</b>			1
<b>TIC: Isopropyl alcohol</b>	<b>93</b>	<b>ug/L</b>			<b>EPA-524.2</b>			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 06:13	JMS	MS-V14	1	BZG1193



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Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-06	Client Sample Name: N16-C2, 7/12/2016 1:55:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.8	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/21/16	07/21/16 18:37	OLH	IC6	1		BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-07	Client Sample Name:	N18-B, 7/12/2016 9:27:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>2.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.087</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	J	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-07	Client Sample Name:	N18-B, 7/12/2016 9:27:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>8.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.65</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-07	Client Sample Name: N18-B, 7/12/2016 9:27:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 06:36	JMS	MS-V14	1	BZG1193

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Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-07	Client Sample Name: N18-B, 7/12/2016 9:27:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 18:51	OLH	IC6	1	BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-08	Client Sample Name: N18-C2, 7/12/2016 9:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-08	Client Sample Name:	N18-C2, 7/12/2016 9:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
<b>Toluene</b>	<b>2.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
<b>Acetone</b>	<b>160</b>	<b>ug/L</b>	<b>10</b>	<b>4.6</b>	<b>EPA-524.2</b>	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-08	Client Sample Name: N18-C2, 7/12/2016 9:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>2-Hexanone</b>	<b>4.1</b>	<b>ug/L</b>	<b>10</b>	<b>3.4</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
<b>Methyl ethyl ketone</b>	<b>370</b>	<b>ug/L</b>	<b>50</b>	<b>12</b>	<b>EPA-524.2</b>	ND	<b>A01</b>	2
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
<b>Tetrahydrofuran</b>	<b>1700</b>	<b>ug/L</b>	<b>100</b>	<b>26</b>	<b>EPA-524.2</b>	ND	<b>A01</b>	2
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.5	%	75 - 125 (LCL - UCL)	EPA-524.2				1
1,2-Dichloroethane-d4 (Surrogate)	92.9	%	75 - 125 (LCL - UCL)	EPA-524.2				2
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)	EPA-524.2				1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-524.2				2
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)	EPA-524.2				1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)	EPA-524.2				2
<b>TIC: 2-Butanol</b>	<b>2.8</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: 2-Butanone</b>	<b>13</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: 2-Ethyl-1-hexanol</b>	<b>14</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: 2-Nonanone</b>	<b>1.6</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: 2-Octanone</b>	<b>1.4</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: Cyclohexanol</b>	<b>1.1</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: Cyclohexanone</b>	<b>42</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: Ethyl Amyl Ketone</b>	<b>1.3</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: Hexanal</b>	<b>1.1</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1
<b>TIC: Isopropyl alcohol</b>	<b>250</b>	<b>ug/L</b>		<b>EPA-524.2</b>				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 06:59	JMS	MS-V14	1	BZG1193
2	EPA-524.2	07/15/16	07/18/16 10:30	JMS	MS-V14	5	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-08	Client Sample Name: N18-C2, 7/12/2016 9:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.5	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 19:05	OLH	IC6	1	BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-09	Client Sample Name:	MW-Dup, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>2.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	J	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-09	Client Sample Name:	MW-Dup, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>8.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.64</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-09	Client Sample Name:	MW-Dup, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/18/16 10:07	JMS	MS-V14	1	BZG1193

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Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619390-09	Client Sample Name: MW-Dup, 7/12/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/21/16	07/21/16 19:19	OLH	IC6	1	BZG1824

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-10	Client Sample Name:	QCAB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-10	Client Sample Name:	QCAB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-10	Client Sample Name:	QCAB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/18/16 09:44	JMS	MS-V14	1	BZG1193

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-11	Client Sample Name:	QCTB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-11	Client Sample Name:	QCTB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619390-11	Client Sample Name:	QCTB, 7/12/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Isopropyl alcohol</b>	<b>250</b>	<b>ug/L</b>			<b>EPA-524.2</b>			<b>1</b>

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/15/16	07/16/16	03:56	JMS	MS-V14	1	BZG1193



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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
Benzene	BZG1193-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1193-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1193-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1193-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1193-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1193-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1193-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1193-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1193-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.14	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
trans-1,3-Dichloropropene	BZG1193-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1193-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1193-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1193-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1193-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1193-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1193-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1193-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1193-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1193-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1193-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1193-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1193-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1193-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1193-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1193-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1193-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1193-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1193-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1193-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1193-BLK1	ND	ug/L	0.50	0.18	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1193</b>						
2-Hexanone	BZG1193-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1193-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1193-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1193-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1193-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1193-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1193-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1193-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1193-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1193-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1193-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1193-BLK1	97.4	%	<b>75 - 125 (LCL - UCL)</b>		
Toluene-d8 (Surrogate)	BZG1193-BLK1	102	%	<b>80 - 120 (LCL - UCL)</b>		
4-Bromofluorobenzene (Surrogate)	BZG1193-BLK1	93.9	%	<b>80 - 120 (LCL - UCL)</b>		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1193</b>									
Benzene	BZG1193-BS1	LCS	26.405	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BZG1193-BS1	LCS	24.468	25.000	ug/L	97.9		70 - 130	
Chlorobenzene	BZG1193-BS1	LCS	26.812	25.000	ug/L	107		70 - 130	
Chloroethane	BZG1193-BS1	LCS	27.632	25.000	ug/L	111		70 - 130	
1,4-Dichlorobenzene	BZG1193-BS1	LCS	25.763	25.000	ug/L	103		70 - 130	
1,1-Dichloroethane	BZG1193-BS1	LCS	27.489	25.000	ug/L	110		70 - 130	
1,1-Dichloroethene	BZG1193-BS1	LCS	27.304	25.000	ug/L	109		70 - 130	
Toluene	BZG1193-BS1	LCS	25.812	25.000	ug/L	103		70 - 130	
Trichloroethene	BZG1193-BS1	LCS	26.685	25.000	ug/L	107		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1193-BS1	LCS	9.8500	10.000	ug/L	98.5		75 - 125	
Toluene-d8 (Surrogate)	BZG1193-BS1	LCS	9.8600	10.000	ug/L	98.6		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1193-BS1	LCS	9.5900	10.000	ug/L	95.9		80 - 120	

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Ontario, CA 91761

Reported: 07/27/2016 10:10  
Project: Rialto Perchlorate Investigator  
Project Number: 2013.0100/2A  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1193</b>		Used client sample: Y - Description: M-6-6 Port 7 (3610038-717), 07/11/2016 12:33								
Benzene	MS	1619388-07	ND	23.803	25.000	ug/L		95.2		70 - 130
	MSD	1619388-07	ND	23.799	25.000	ug/L	0.0	95.2	20	70 - 130
Bromodichloromethane	MS	1619388-07	ND	21.665	25.000	ug/L		86.7		70 - 130
	MSD	1619388-07	ND	21.907	25.000	ug/L	1.1	87.6	20	70 - 130
Chlorobenzene	MS	1619388-07	ND	23.516	25.000	ug/L		94.1		70 - 130
	MSD	1619388-07	ND	22.768	25.000	ug/L	3.2	91.1	20	70 - 130
Chloroethane	MS	1619388-07	ND	24.647	25.000	ug/L		98.6		70 - 130
	MSD	1619388-07	ND	25.094	25.000	ug/L	1.8	100	20	70 - 130
1,4-Dichlorobenzene	MS	1619388-07	ND	22.990	25.000	ug/L		92.0		70 - 130
	MSD	1619388-07	ND	22.366	25.000	ug/L	2.8	89.5	20	70 - 130
1,1-Dichloroethane	MS	1619388-07	ND	24.606	25.000	ug/L		98.4		70 - 130
	MSD	1619388-07	ND	24.764	25.000	ug/L	0.6	99.1	20	70 - 130
1,1-Dichloroethene	MS	1619388-07	ND	24.430	25.000	ug/L		97.7		70 - 130
	MSD	1619388-07	ND	24.651	25.000	ug/L	0.9	98.6	20	70 - 130
Toluene	MS	1619388-07	ND	23.157	25.000	ug/L		92.6		70 - 130
	MSD	1619388-07	ND	23.242	25.000	ug/L	0.4	93.0	20	70 - 130
Trichloroethene	MS	1619388-07	ND	23.270	25.000	ug/L		93.1		70 - 130
	MSD	1619388-07	ND	23.422	25.000	ug/L	0.7	93.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619388-07	ND	9.7300	10.000	ug/L		97.3		75 - 125
	MSD	1619388-07	ND	9.8100	10.000	ug/L	0.8	98.1		75 - 125
Toluene-d8 (Surrogate)	MS	1619388-07	ND	9.9600	10.000	ug/L		99.6		80 - 120
	MSD	1619388-07	ND	9.9100	10.000	ug/L	0.5	99.1		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619388-07	ND	9.8000	10.000	ug/L		98.0		80 - 120
	MSD	1619388-07	ND	9.6600	10.000	ug/L	1.4	96.6		80 - 120

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	BZG1824-BLK1	ND	ug/L	4.0	0.72	

**QC Batch ID: BZG1824**



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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	<u>Control Limits</u>		Lab Quals
								Percent Recovery	RPD	
Perchlorate	BZG1824-BS1	LCS	10.221	10.000	ug/L	102		85 - 115		

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Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1824</b>		Used client sample: Y - Description: N8-4, 07/12/2016 13:15									
Perchlorate	DUP	1619390-01	7.3546	7.2970		ug/L	0.8		15		
	MS	1619390-01	7.3546	16.692	10.101	ug/L		92.4		80 - 120	
	MSD	1619390-01	7.3546	16.812	10.101	ug/L	0.7	93.6	15	80 - 120	



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/27/2016 10:10  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013.0100/2A  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/29/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619392  
Invoice ID: B241742

Enclosed are the results of analyses for samples received by the laboratory on 7/14/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## BC Laboratories, Inc.

## Chain of Custody

## Report To:

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911

## Analysis Requested

Name:	Geologic Associates	Phone:	909-626-2282	Project:	Rialto	Project #:	2013-0100	Samplers Name:	B. Sculina, M. Campbell	WO #:		Lab #:	16-19392	Date Sampled:		Time:		Matrix:	
Address:	1831 Commercenter East											-1	M-5 Shallow (3610038-041)						
City:	San Bernardino											-2	M-4 Deep (3610038-703)						
State:CA Zip: 92408												1	M-5 Port 1 (3610038-704)	7-13-16	14:20	64			
Attn:	Ralph Murphy											2	M-5 Port 2 (3610038-705)		13:30		X		
												3	M-5 Port 3 (3610038-706)		12:00		X		
												4	M-5 Port 4 (3610038-707)		11:30		X		
												5	M-5 Port 5 3610038-708)		10:55		X		
												6	M-5 Port 6 (3610038-709)		10:25		X		
												7	M-5 Port 7 (3610038-710)		09:55		X		
												8	QCAB		Lab D.T		X		
												9	QCER		Lab D.T		X		
												10	QCCTB		Lab D.T		X		
													Samples need EDT						
														Relinquished by: (Signature)	7-13-16 17:00	Date & Time	7-14-16 12:30	Received By:	
														Relinquished by: (Signature)	7-14-16 16:30	Date & Time	7-14-16 18:30	Received By:	
														Relinquished by: (Signature)	7-14-16 19:55	Date & Time	7-14-16 19:55	Received By:	

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## Chain of Custody and Cooler Receipt Form for 1619392 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM				Page _____ Of _____				
Submission #: 1619392										
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> W / S				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>				Comments:						
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:							
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97	Container: PE	Thermometer ID: 208	Date/Time 7-14 2005					
		Temperature: (A) 0.0 °C / (C) 0.1 °C	Analyst Init. ARL							
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	0	0	0	0	0	0	0	C	E	
4oz / 8oz / 16oz PE UNPRES										
2oz CT <sup>14</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	RBC	AFC	AFC	AFC	NBC	AFC	AFC	AB	AB	
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										
Comments:										
Sample Numbering Completed By: _____	Date/Time: 7-14-16 11:30									
A = Actual / C = Corrected	Rev 21 05/23/2016 [S:\WPDoc\WordPerfect\LAB_DOCS\ISAMREC\rev 20]									

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619392-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 1 (3610038-704) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 14:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 2 (3610038-705) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 13:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 3 (3610038-706) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 12:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 4 (3610038-707) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 11:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 5 (3610038-708) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 10:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 6 (3610038-709) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 10:25 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619392-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-5 Port 7 (3610038-710) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 09:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619392-08	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCAB <b>Sampled By:</b> ---		<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater	
1619392-09	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCEB <b>Sampled By:</b> ---		<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater	
1619392-10	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCTB <b>Sampled By:</b> ---		<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Blank Water	

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-01	Client Sample Name: M-5 Port 1 (3610038-704), 7/13/2016 2:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.57</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>1.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-01	Client Sample Name: M-5 Port 1 (3610038-704), 7/13/2016 2:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>5.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.63</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.51</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-01	Client Sample Name: M-5 Port 1 (3610038-704), 7/13/2016 2:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 01:01	JMS	MS-V14	1	BZG1308

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-01	Client Sample Name: M-5 Port 1 (3610038-704), 7/13/2016 2:20:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.5	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/26/16 23:34	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-02	Client Sample Name: M-5 Port 2 (3610038-705), 7/13/2016 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.19</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.13</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-02	Client Sample Name: M-5 Port 2 (3610038-705), 7/13/2016 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.62</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.75</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-02	Client Sample Name: M-5 Port 2 (3610038-705), 7/13/2016 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 00:38	JMS	MS-V14	1	BZG1308

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-02	Client Sample Name: M-5 Port 2 (3610038-705), 7/13/2016 1:30:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.4	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 00:57	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-03	Client Sample Name: M-5 Port 3 (3610038-706), 7/13/2016 12:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-03	Client Sample Name: M-5 Port 3 (3610038-706), 7/13/2016 12:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-03	Client Sample Name: M-5 Port 3 (3610038-706), 7/13/2016 12:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 00:15	JMS	MS-V14	1	BZG1308

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-03	Client Sample Name: M-5 Port 3 (3610038-706), 7/13/2016 12:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.1	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 01:11	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-04	Client Sample Name: M-5 Port 4 (3610038-707), 7/13/2016 11:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-04	Client Sample Name:	M-5 Port 4 (3610038-707), 7/13/2016 11:30:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-04	Client Sample Name: M-5 Port 4 (3610038-707), 7/13/2016 11:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 23:53	JMS	MS-V14	1	BZG1308

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-04	Client Sample Name: M-5 Port 4 (3610038-707), 7/13/2016 11:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.3	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 01:24	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-05	Client Sample Name: M-5 Port 5 (3610038-708), 7/13/2016 10:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-05	Client Sample Name: M-5 Port 5 (3610038-708), 7/13/2016 10:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-05	Client Sample Name: M-5 Port 5 (3610038-708), 7/13/2016 10:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 23:30	JMS	MS-V14	1	BZG1308

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-05	Client Sample Name: M-5 Port 5 (3610038-708), 7/13/2016 10:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	0.82	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC	Batch ID
1	EPA-314.0	07/26/16	07/27/16 01:38	OLH	IC6	1		BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-06	Client Sample Name: M-5 Port 6 (3610038-709), 7/13/2016 10:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-06	Client Sample Name: M-5 Port 6 (3610038-709), 7/13/2016 10:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-06	Client Sample Name: M-5 Port 6 (3610038-709), 7/13/2016 10:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 12:25	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-06	Client Sample Name: M-5 Port 6 (3610038-709), 7/13/2016 10:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 01:52	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-07	Client Sample Name: M-5 Port 7 (3610038-710), 7/13/2016 9:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-07	Client Sample Name: M-5 Port 7 (3610038-710), 7/13/2016 9:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-07	Client Sample Name: M-5 Port 7 (3610038-710), 7/13/2016 9:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 12:02	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-07	Client Sample Name: M-5 Port 7 (3610038-710), 7/13/2016 9:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 02:06	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-08	Client Sample Name:	QCAB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-08	Client Sample Name:	QCAB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-08	Client Sample Name:	QCAB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 11:39	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-08	Client Sample Name: QCAB, 7/13/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 02:20	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-09	Client Sample Name:	QCEB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-09	Client Sample Name:	QCEB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-09	Client Sample Name:	QCEB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 11:16	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619392-09	Client Sample Name: QCEB, 7/13/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/27/16 02:34	OLH	IC6	1	BZG2257

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-10	Client Sample Name:	QCTB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-10	Client Sample Name:	QCTB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619392-10	Client Sample Name:	QCTB, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 10:53	JMS	MS-V14	1	BZG1307

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
Benzene	BZG1307-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1307-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1307-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1307-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1307-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1307-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1307-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1307-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1307-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
trans-1,3-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1307-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1307-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1307-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1307-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1307-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1307-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1307-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1307-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1307-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1307-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1307-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1307-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1307-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
2-Hexanone	BZG1307-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1307-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1307-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1307-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1307-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1307-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1307-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1307-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1307-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1307-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1307-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1307-BLK1	96.9	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1307-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1307-BLK1	95.2	%	80 - 120 (LCL - UCL)		
<b>QC Batch ID: BZG1308</b>						
Benzene	BZG1308-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1308-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1308-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1308-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1308-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1308-BLK1	ND	ug/L	1.0	0.44	

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**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1308</b>						
1,2-Dibromoethane	BZG1308-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1308-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1308-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1308-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1308-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1308-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1308-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1308-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.16	

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1308</b>						
Trichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1308-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1308-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1308-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1308-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1308-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1308-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1308-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1308-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.18	
2-Hexanone	BZG1308-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1308-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1308-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1308-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1308-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1308-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1308-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1308-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1308-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1308-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1308-BLK1	ND	ug/L	0.50	0.082	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BZG1308-BLK1</b>	<b>97.8</b>	%	<b>75 - 125 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BZG1308-BLK1</b>	<b>100</b>	%	<b>80 - 120 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BZG1308-BLK1</b>	<b>96.1</b>	%	<b>80 - 120 (LCL - UCL)</b>		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1307</b>									
Benzene	BZG1307-BS1	LCS	26.432	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BZG1307-BS1	LCS	24.594	25.000	ug/L	98.4		70 - 130	
Chlorobenzene	BZG1307-BS1	LCS	26.461	25.000	ug/L	106		70 - 130	
Chloroethane	BZG1307-BS1	LCS	26.825	25.000	ug/L	107		70 - 130	
1,4-Dichlorobenzene	BZG1307-BS1	LCS	26.044	25.000	ug/L	104		70 - 130	
1,1-Dichloroethane	BZG1307-BS1	LCS	27.361	25.000	ug/L	109		70 - 130	
1,1-Dichloroethene	BZG1307-BS1	LCS	27.047	25.000	ug/L	108		70 - 130	
Toluene	BZG1307-BS1	LCS	25.742	25.000	ug/L	103		70 - 130	
Trichloroethene	BZG1307-BS1	LCS	26.996	25.000	ug/L	108		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1307-BS1	LCS	9.9000	10.000	ug/L	99.0		75 - 125	
Toluene-d8 (Surrogate)	BZG1307-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1307-BS1	LCS	9.5300	10.000	ug/L	95.3		80 - 120	
<b>QC Batch ID: BZG1308</b>									
Benzene	BZG1308-BS1	LCS	24.511	25.000	ug/L	98.0		70 - 130	
Bromodichloromethane	BZG1308-BS1	LCS	22.797	25.000	ug/L	91.2		70 - 130	
Chlorobenzene	BZG1308-BS1	LCS	24.247	25.000	ug/L	97.0		70 - 130	
Chloroethane	BZG1308-BS1	LCS	24.743	25.000	ug/L	99.0		70 - 130	
1,4-Dichlorobenzene	BZG1308-BS1	LCS	23.492	25.000	ug/L	94.0		70 - 130	
1,1-Dichloroethane	BZG1308-BS1	LCS	25.574	25.000	ug/L	102		70 - 130	
1,1-Dichloroethene	BZG1308-BS1	LCS	25.037	25.000	ug/L	100		70 - 130	
Toluene	BZG1308-BS1	LCS	23.684	25.000	ug/L	94.7		70 - 130	
Trichloroethene	BZG1308-BS1	LCS	25.232	25.000	ug/L	101		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1308-BS1	LCS	9.6300	10.000	ug/L	96.3		75 - 125	
Toluene-d8 (Surrogate)	BZG1308-BS1	LCS	9.9100	10.000	ug/L	99.1		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1308-BS1	LCS	9.7000	10.000	ug/L	97.0		80 - 120	

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1307</b>		Used client sample: Y - Description: M-5 Port 7 (3610038-710), 07/13/2016 09:55								
Benzene	MS	1619392-07	ND	22.985	25.000	ug/L		91.9		70 - 130
	MSD	1619392-07	ND	23.024	25.000	ug/L	0.2	92.1	20	70 - 130
Bromodichloromethane	MS	1619392-07	ND	21.292	25.000	ug/L		85.2		70 - 130
	MSD	1619392-07	ND	21.739	25.000	ug/L	2.1	87.0	20	70 - 130
Chlorobenzene	MS	1619392-07	ND	23.092	25.000	ug/L		92.4		70 - 130
	MSD	1619392-07	ND	22.644	25.000	ug/L	2.0	90.6	20	70 - 130
Chloroethane	MS	1619392-07	ND	23.645	25.000	ug/L		94.6		70 - 130
	MSD	1619392-07	ND	23.532	25.000	ug/L	0.5	94.1	20	70 - 130
1,4-Dichlorobenzene	MS	1619392-07	ND	22.637	25.000	ug/L		90.5		70 - 130
	MSD	1619392-07	ND	22.253	25.000	ug/L	1.7	89.0	20	70 - 130
1,1-Dichloroethane	MS	1619392-07	ND	23.590	25.000	ug/L		94.4		70 - 130
	MSD	1619392-07	ND	24.035	25.000	ug/L	1.9	96.1	20	70 - 130
1,1-Dichloroethene	MS	1619392-07	ND	23.690	25.000	ug/L		94.8		70 - 130
	MSD	1619392-07	ND	23.674	25.000	ug/L	0.1	94.7	20	70 - 130
Toluene	MS	1619392-07	ND	22.536	25.000	ug/L		90.1		70 - 130
	MSD	1619392-07	ND	22.653	25.000	ug/L	0.5	90.6	20	70 - 130
Trichloroethene	MS	1619392-07	ND	22.904	25.000	ug/L		91.6		70 - 130
	MSD	1619392-07	ND	22.982	25.000	ug/L	0.3	91.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619392-07	ND	9.5200	10.000	ug/L		95.2		75 - 125
	MSD	1619392-07	ND	9.7900	10.000	ug/L	2.8	97.9		75 - 125
Toluene-d8 (Surrogate)	MS	1619392-07	ND	9.9200	10.000	ug/L		99.2		80 - 120
	MSD	1619392-07	ND	10.080	10.000	ug/L	1.6	101		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619392-07	ND	9.9000	10.000	ug/L		99.0		80 - 120
	MSD	1619392-07	ND	9.6100	10.000	ug/L	3.0	96.1		80 - 120
<b>QC Batch ID: BZG1308</b>		Used client sample: Y - Description: M-5 Port 5 (3610038-708), 07/13/2016 10:55								
Benzene	MS	1619392-05	ND	23.985	25.000	ug/L		95.9		70 - 130
	MSD	1619392-05	ND	24.136	25.000	ug/L	0.6	96.5	20	70 - 130
Bromodichloromethane	MS	1619392-05	ND	22.345	25.000	ug/L		89.4		70 - 130
	MSD	1619392-05	ND	22.505	25.000	ug/L	0.7	90.0	20	70 - 130
Chlorobenzene	MS	1619392-05	ND	23.735	25.000	ug/L		94.9		70 - 130
	MSD	1619392-05	ND	23.256	25.000	ug/L	2.0	93.0	20	70 - 130
Chloroethane	MS	1619392-05	ND	24.443	25.000	ug/L		97.8		70 - 130
	MSD	1619392-05	ND	24.692	25.000	ug/L	1.0	98.8	20	70 - 130
1,4-Dichlorobenzene	MS	1619392-05	ND	23.344	25.000	ug/L		93.4		70 - 130
	MSD	1619392-05	ND	22.714	25.000	ug/L	2.7	90.9	20	70 - 130
1,1-Dichloroethane	MS	1619392-05	ND	24.954	25.000	ug/L		99.8		70 - 130
	MSD	1619392-05	ND	25.177	25.000	ug/L	0.9	101	20	70 - 130

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1308</b>		Used client sample: Y - Description: M-5 Port 5 (3610038-708), 07/13/2016 10:55								
1,1-Dichloroethene	MS	1619392-05	ND	24.452	25.000	ug/L		97.8		70 - 130
	MSD	1619392-05	ND	24.865	25.000	ug/L	1.7	99.5	20	70 - 130
Toluene	MS	1619392-05	ND	23.571	25.000	ug/L		94.3		70 - 130
	MSD	1619392-05	ND	23.747	25.000	ug/L	0.7	95.0	20	70 - 130
Trichloroethene	MS	1619392-05	ND	23.870	25.000	ug/L		95.5		70 - 130
	MSD	1619392-05	ND	24.236	25.000	ug/L	1.5	96.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619392-05	ND	9.6100	10.000	ug/L		96.1		75 - 125
	MSD	1619392-05	ND	9.5900	10.000	ug/L	0.2	95.9		75 - 125
Toluene-d8 (Surrogate)	MS	1619392-05	ND	9.9400	10.000	ug/L		99.4		80 - 120
	MSD	1619392-05	ND	10.010	10.000	ug/L	0.7	100		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619392-05	ND	9.8000	10.000	ug/L		98.0		80 - 120
	MSD	1619392-05	ND	9.5400	10.000	ug/L	2.7	95.4		80 - 120

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG2257</b>						
Perchlorate	BZG2257-BLK1	ND	ug/L	4.0	0.72	



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Ontario, CA 91761

Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
Perchlorate	BZG2257-BS1	LCS	10.831	10.000	ug/L	108		85 - 115	



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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2257</b>		Used client sample: Y - Description: M-5 Port 1 (3610038-704), 07/13/2016 14:20									
Perchlorate	DUP	1619392-01	1.5115	1.5869		ug/L	4.9		15		J
	MS	1619392-01	1.5115	13.140	10.101	ug/L		115		80 - 120	
	MSD	1619392-01	1.5115	12.929	10.101	ug/L	1.6	113	15	80 - 120	



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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/28/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate Investigation  
BCL Work Order: 1619393  
Invoice ID: B241741

Enclosed are the results of analyses for samples received by the laboratory on 7/14/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

## Chain of Custody and Cooler Receipt Form for 1619393 Page 1 of 2

## Chain of Custody Form

Report To:	Client: Geological Associate, Project #: 2013-0106		
Attn:	Ralph Murphy, Sampler: R.614		
Street Address:	2777 E Gventh Rd, Bakersfield		
City, State, Zip:	Oildale, CA 93308		
Phone:	626-2282		
Email:	Fax: 626-7223		
Work Order #:	16 - 19393		
Sample #	Description	Date Sampled	Time Sampled
1	N 20-6	7/13/16	15:10
	N 20-5		15:38
2	N 20-4		16:08
3			

Comments:	Sample	Matrix	Result Request		**Surcharge (\$10 Day*)
			STD	5 Day*	
Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sludge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ground Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drinking Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Waste Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					Notes

CHK BY: *R. Murphy* DISTRIBUTION: *R. Murphy*

SUB-OUT: *R. Murphy*

EDF Required?		Global ID (Needed for EDF)	System # (Needed for EDT)
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	1. Relinquished By <i>Ralph Murphy</i>	Date <i>7/14/16</i> Time <i>17:00</i>
<input type="checkbox"/>	<input type="checkbox"/> Send Copy to State of CA? (EDT)	2. Relinquished By <i>R. Murphy</i>	Date <i>7/14/16</i> Time <i>17:30</i>
<input type="checkbox"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Relinquished By <i>R. Murphy</i>	Date <i>7/14/16</i> Time <i>18:00</i>

Billing	Same as above	EDF Required?	Geotracker (Needed for EDF)
Client:		<input checked="" type="checkbox"/>	1. Relinquished By <i>Ralph Murphy</i>
Address:		<input type="checkbox"/> No	Date <i>7/14/16</i> Time <i>17:00</i>
City:		<input type="checkbox"/> Send Copy to State of CA? (EDT)	2. Relinquished By <i>R. Murphy</i>
Attn:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3. Relinquished By <i>R. Murphy</i>
P.O. #:			Date <i>7/14/16</i> Time <i>19:55</i>

BC Laboratories, Inc. - 4100 Atlas Ct. - Bakersfield, CA 93308 - (661) 327-4911 - Fax: (661) 327-1918 - www.bclabs.com

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## Chain of Custody and Cooler Receipt Form for 1619393 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page	Of		
Submission #: 1619393													
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> (W) / S					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments:											
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Comments:											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>									
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97 Container: PE Thermometer ID: 208		Date/Time 7-14 2005									
		Temperature: (A) 0.0 °C / (C) 0.1 °C				Analyst Init ARL							
SAMPLE CONTAINERS		SAMPLE NUMBERS											
		1	2	3	4	5	6	7	8	9	10		
QT PE UNPRES													
4oz / 8oz / 16oz PE UNPRES		D	D	D									
2oz Cr <sup>6+</sup>													
QT INORGANIC CHEMICAL METALS													
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz													
PT CYANIDE													
PT NITROGEN FORMS													
PT TOTAL SULFIDE													
2oz NITRATE / NITRITE													
PT TOTAL ORGANIC CARBON													
PT CHEMICAL OXYGEN DEMAND													
PIA PHENOLICS													
40ml VOA VIAL TRAVEL BLANK													
40ml VOA VIAL													
QT EPA 1664													
PT ODOR													
RADIOLOGICAL													
BACTERIOLOGICAL													
40 ml VOA VIAL- 504													
QT EPA 508/608/8080													
QT EPA 515.1/8150													
QT EPA 525													
QT EPA 525 TRAVEL BLANK													
40ml EPA 547													
40ml EPA 531.1													
8oz EPA 548													
QT EPA 549													
QT EPA 8015M													
QT EPA 8270													
8oz / 16oz / 32oz AMBER													
8oz / 16oz / 32oz JAR													
SOIL SLEEVE													
PCB VIAL													
PLASTIC BAG													
TEDLAR BAG													
FERROUS IRON													
ENCORE													
SMART KIT													
SUMMA CANISTER													
Comments: _____													
Sample Numbering Completed By: _____													
<input checked="" type="checkbox"/> - Actual / <input type="checkbox"/> - Corrected		Date/Time: 7/14/16 21:30		Rev 21 05/23/2016		(S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SIAMRECRev 20)							

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Ontario, CA 91761

**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619393-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N20-6 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 15:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619393-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N20-5 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 15:38 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619393-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N20-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 16:08 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Ontario, CA 91761

**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-01	Client Sample Name: N20-6, 7/13/2016 3:10:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-01	Client Sample Name:	N20-6, 7/13/2016 3:10:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-01	Client Sample Name: N20-6, 7/13/2016 3:10:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 12:48	JMS	MS-V14	1	BZG1194

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Reported: 07/28/2016 23:22  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619393-01	Client Sample Name: N20-6, 7/13/2016 3:10:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/26/16	07/26/16 19:52	EMW	IC6	1		BZG2256

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-02	Client Sample Name: N20-5, 7/13/2016 3:38:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-02	Client Sample Name:	N20-5, 7/13/2016 3:38:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-02	Client Sample Name: N20-5, 7/13/2016 3:38:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 13:11	JMS	MS-V14	1	BZG1194

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Reported: 07/28/2016 23:22  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619393-02	Client Sample Name: N20-5, 7/13/2016 3:38:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/26/16 20:06	EMW	IC6	1	BZG2256

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-03	Client Sample Name: N20-4, 7/13/2016 4:08:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-03	Client Sample Name:	N20-4, 7/13/2016 4:08:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619393-03	Client Sample Name: N20-4, 7/13/2016 4:08:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 13:34	JMS	MS-V14	1	BZG1194

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Reported: 07/28/2016 23:22  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619393-03	Client Sample Name: N20-4, 7/13/2016 4:08:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/26/16	07/26/16 20:20	EMW	IC6	1		BZG2256

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
Benzene	BZG1194-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1194-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1194-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
trans-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1194-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1194-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1194-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1194-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1194-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1194-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1194-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1194-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1194-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1194-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
2-Hexanone	BZG1194-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1194-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1194-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1194-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1194-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1194-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1194-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1194-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1194-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1194-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1194-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BLK1	97.2	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1194-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1194-BLK1	95.5	%	80 - 120 (LCL - UCL)		

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**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1194</b>									
Benzene	BZG1194-BS1	LCS	27.238	25.000	ug/L	109		70 - 130	
Bromodichloromethane	BZG1194-BS1	LCS	24.777	25.000	ug/L	99.1		70 - 130	
Chlorobenzene	BZG1194-BS1	LCS	27.062	25.000	ug/L	108		70 - 130	
Chloroethane	BZG1194-BS1	LCS	28.453	25.000	ug/L	114		70 - 130	
1,4-Dichlorobenzene	BZG1194-BS1	LCS	26.277	25.000	ug/L	105		70 - 130	
1,1-Dichloroethane	BZG1194-BS1	LCS	28.129	25.000	ug/L	113		70 - 130	
1,1-Dichloroethene	BZG1194-BS1	LCS	28.185	25.000	ug/L	113		70 - 130	
Toluene	BZG1194-BS1	LCS	26.363	25.000	ug/L	105		70 - 130	
Trichloroethene	BZG1194-BS1	LCS	27.925	25.000	ug/L	112		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BS1	LCS	10.020	10.000	ug/L	100		75 - 125	
Toluene-d8 (Surrogate)	BZG1194-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1194-BS1	LCS	9.6000	10.000	ug/L	96.0		80 - 120	



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**Reported:** 07/28/2016 23:22  
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**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1194</b>		Used client sample: Y - Description: M-2 Port 4 (3610038-30), 07/12/2016 15:50									
Benzene	MS	1619389-01	ND	23.257	25.000	ug/L		93.0		70 - 130	
	MSD	1619389-01	ND	23.199	25.000	ug/L	0.2	92.8	20	70 - 130	
Bromodichloromethane	MS	1619389-01	ND	21.449	25.000	ug/L		85.8		70 - 130	
	MSD	1619389-01	ND	21.764	25.000	ug/L	1.5	87.1	20	70 - 130	
Chlorobenzene	MS	1619389-01	ND	22.926	25.000	ug/L		91.7		70 - 130	
	MSD	1619389-01	ND	22.498	25.000	ug/L	1.9	90.0	20	70 - 130	
Chloroethane	MS	1619389-01	ND	24.023	25.000	ug/L		96.1		70 - 130	
	MSD	1619389-01	ND	24.466	25.000	ug/L	1.8	97.9	20	70 - 130	
1,4-Dichlorobenzene	MS	1619389-01	ND	22.191	25.000	ug/L		88.8		70 - 130	
	MSD	1619389-01	ND	21.971	25.000	ug/L	1.0	87.9	20	70 - 130	
1,1-Dichloroethane	MS	1619389-01	0.25000	24.417	25.000	ug/L		96.7		70 - 130	
	MSD	1619389-01	0.25000	24.555	25.000	ug/L	0.6	97.2	20	70 - 130	
1,1-Dichloroethene	MS	1619389-01	ND	23.880	25.000	ug/L		95.5		70 - 130	
	MSD	1619389-01	ND	24.151	25.000	ug/L	1.1	96.6	20	70 - 130	
Toluene	MS	1619389-01	ND	23.011	25.000	ug/L		92.0		70 - 130	
	MSD	1619389-01	ND	22.762	25.000	ug/L	1.1	91.0	20	70 - 130	
Trichloroethene	MS	1619389-01	1.1410	24.131	25.000	ug/L		92.0		70 - 130	
	MSD	1619389-01	1.1410	24.067	25.000	ug/L	0.3	91.7	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1619389-01	ND	9.4100	10.000	ug/L		94.1		75 - 125	
	MSD	1619389-01	ND	9.7400	10.000	ug/L	3.4	97.4		75 - 125	
Toluene-d8 (Surrogate)	MS	1619389-01	ND	10.030	10.000	ug/L		100		80 - 120	
	MSD	1619389-01	ND	9.9300	10.000	ug/L	1.0	99.3		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1619389-01	ND	9.8200	10.000	ug/L		98.2		80 - 120	
	MSD	1619389-01	ND	9.6800	10.000	ug/L	1.4	96.8		80 - 120	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	QC Batch ID: BZG2256 BZG2256-BLK1	ND	ug/L	4.0	0.72	



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Ontario, CA 91761

Reported: 07/28/2016 23:22  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
Perchlorate	BZG2256-BS1	LCS	9.9034	10.000	ug/L	99.0		85 - 115	
<b>QC Batch ID: BZG2256</b>									



Geologic Associates - Ontario  
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Reported: 07/28/2016 23:22  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2256</b>		Used client sample: N									
Perchlorate	DUP	1619385-02	55.058	56.858		ug/L	3.2			15	
	MS	1619385-02	55.058	110.70	50.505	ug/L		110		80 - 120	
	MSD	1619385-02	55.058	110.26	50.505	ug/L	0.4	109	15	80 - 120	



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Ontario, CA 91761

**Reported:** 07/28/2016 23:22  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/29/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate - EDT  
BCL Work Order: 1619394  
Invoice ID: B241743

Enclosed are the results of analyses for samples received by the laboratory on 7/14/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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### Quality Control Reports

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## Chain of Custody and Cooler Receipt Form for 1619394 Page 1 of 2

## Chain of Custody

4100 Atlas Ct Bakersfield, CA  
93308 (661)327-4911Report To:  
Analysis Requested

Name	Geologic Associates	Phone	626-2282	Date Sampled	Time	Matrix	CHK BY	DISTRIBUTION	Date & Time
Address	1831 Commercenter East	Project:	Rialto						
City	San Bernardino	Project #	2013-COOL						
State/CA Zip	92408	Samplers Name	B. Schilder, M. Campbell						
Attn	Ralph Murphy	WO #:							
Lab #	1619394								
1	M-1 Station 1 (3610038-26)								
2	M-1 Port 1 (3610038-20)								
3	M-2 Port 1 (3610038-27)								
4	M-2 Port 2 (3610038-28)	7-13-16	0826	Cow	X	X			
5	M-2 Port 3 (3610038-29)	7-13-16	0745	Cow	X	X			
6	M-2 Port 4 (3610038-30)								
7	M-2 Port 5 (3610038-31)								
8	M-2 Port 6 (3610038-32)								
9	M-2 Port 7 (3610038-33)								
10	Westerly - Dwp	7-13-16	-	Cow	X	X			
11									
12									
Samples need EDT									
Reinquished by (Signature) Reinforced by (Signature) Received by (Signature) Date & Time									
Reinquished by (Signature) Reinforced by (Signature) Received by (Signature) Date & Time									
Reinquished by (Signature) Reinforced by (Signature) Received by (Signature) Date & Time									

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## Chain of Custody and Cooler Receipt Form for 1619394 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page _____ Of _____	
Submission #: 1619394											
SHIPPING INFORMATION										SHIPPING CONTAINER	
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	BC Lab Field Service <input checked="" type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> <i>(W)</i> / S	
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____											
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____								
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>									
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.97	Container: PE	Thermometer ID: 208								
	Temperature: (A) 0.0 °C / (C) 0.1 °C	Date/Time 7-14-2005									
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES	0	0	0								
2oz C16											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL	ABC	ABC	ABC								
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL - 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: _____	Date/Time: 7-14-16 2130										
Sample Numbering Completed By: _____	Rev 21 05/23/2016										
- A = Analyzed / C = Concentrated											[S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\ISAMRECRev 20]

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619394-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 2 (3610038-28) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 08:26 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619394-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M-2 Port 3 (3610038-29) <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 07:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619394-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> Westbay-Dup <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-01	Client Sample Name: M-2 Port 2 (3610038-28), 7/13/2016 8:26:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>2.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	<b>ND</b>		<b>1</b>
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-01	Client Sample Name: M-2 Port 2 (3610038-28), 7/13/2016 8:26:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-01	Client Sample Name: M-2 Port 2 (3610038-28), 7/13/2016 8:26:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/15/16	07/16/16 02:47	JMS	MS-V14	1	BZG1194

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Ontario, CA 91761

Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619394-01	Client Sample Name: M-2 Port 2 (3610038-28), 7/13/2016 8:26:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	16	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/26/16 20:34	EMW	IC6	1	BZG2256

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-02	Client Sample Name: M-2 Port 3 (3610038-29), 7/13/2016 7:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.20</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>2.3</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-02	Client Sample Name: M-2 Port 3 (3610038-29), 7/13/2016 7:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.36</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-02	Client Sample Name: M-2 Port 3 (3610038-29), 7/13/2016 7:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Diethyl ether</b>	<b>0.33</b>	<b>ug/L</b>			<b>EPA-524.2</b>			<b>1</b>

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/15/16	07/16/16	03:10	JMS	MS-V14	1	BZG1194



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Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619394-02	Client Sample Name: M-2 Port 3 (3610038-29), 7/13/2016 7:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	22	ug/L	8.0	1.4	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/26/16 22:11	JSW	IC6	2	BZG2256

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-03	Client Sample Name:	Westbay-Dup, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.18</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>2.2</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-03	Client Sample Name:	Westbay-Dup, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619394-03	Client Sample Name:	Westbay-Dup, 7/13/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
<b>TIC: Diethyl ether</b>	<b>0.29</b>	<b>ug/L</b>			<b>EPA-524.2</b>			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/15/16	07/16/16	03:33	JMS	MS-V14	1	BZG1194



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Ontario, CA 91761

Reported: 07/29/2016 8:36  
Project: Rialto Perchlorate - EDT  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619394-03	Client Sample Name: Westbay-Dup, 7/13/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	20	ug/L	8.0	1.4	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/26/16	07/26/16 22:52	JSW	IC6	2	BZG2256

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
Benzene	BZG1194-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1194-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1194-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
trans-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1194-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1194-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1194-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1194-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1194-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1194-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1194-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1194-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1194-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1194-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.18	

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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
2-Hexanone	BZG1194-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1194-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1194-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1194-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1194-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1194-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1194-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1194-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1194-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1194-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1194-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BLK1	97.2	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1194-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1194-BLK1	95.5	%	80 - 120 (LCL - UCL)		

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**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1194</b>									
Benzene	BZG1194-BS1	LCS	27.238	25.000	ug/L	109		70 - 130	
Bromodichloromethane	BZG1194-BS1	LCS	24.777	25.000	ug/L	99.1		70 - 130	
Chlorobenzene	BZG1194-BS1	LCS	27.062	25.000	ug/L	108		70 - 130	
Chloroethane	BZG1194-BS1	LCS	28.453	25.000	ug/L	114		70 - 130	
1,4-Dichlorobenzene	BZG1194-BS1	LCS	26.277	25.000	ug/L	105		70 - 130	
1,1-Dichloroethane	BZG1194-BS1	LCS	28.129	25.000	ug/L	113		70 - 130	
1,1-Dichloroethene	BZG1194-BS1	LCS	28.185	25.000	ug/L	113		70 - 130	
Toluene	BZG1194-BS1	LCS	26.363	25.000	ug/L	105		70 - 130	
Trichloroethene	BZG1194-BS1	LCS	27.925	25.000	ug/L	112		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BS1	LCS	10.020	10.000	ug/L	100		75 - 125	
Toluene-d8 (Surrogate)	BZG1194-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1194-BS1	LCS	9.6000	10.000	ug/L	96.0		80 - 120	

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**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1194</b>		Used client sample: Y - Description: M-2 Port 4 (3610038-30), 07/12/2016 15:50								
Benzene	MS	1619389-01	ND	23.257	25.000	ug/L		93.0		70 - 130
	MSD	1619389-01	ND	23.199	25.000	ug/L	0.2	92.8	20	70 - 130
Bromodichloromethane	MS	1619389-01	ND	21.449	25.000	ug/L		85.8		70 - 130
	MSD	1619389-01	ND	21.764	25.000	ug/L	1.5	87.1	20	70 - 130
Chlorobenzene	MS	1619389-01	ND	22.926	25.000	ug/L		91.7		70 - 130
	MSD	1619389-01	ND	22.498	25.000	ug/L	1.9	90.0	20	70 - 130
Chloroethane	MS	1619389-01	ND	24.023	25.000	ug/L		96.1		70 - 130
	MSD	1619389-01	ND	24.466	25.000	ug/L	1.8	97.9	20	70 - 130
1,4-Dichlorobenzene	MS	1619389-01	ND	22.191	25.000	ug/L		88.8		70 - 130
	MSD	1619389-01	ND	21.971	25.000	ug/L	1.0	87.9	20	70 - 130
1,1-Dichloroethane	MS	1619389-01	0.25000	24.417	25.000	ug/L		96.7		70 - 130
	MSD	1619389-01	0.25000	24.555	25.000	ug/L	0.6	97.2	20	70 - 130
1,1-Dichloroethene	MS	1619389-01	ND	23.880	25.000	ug/L		95.5		70 - 130
	MSD	1619389-01	ND	24.151	25.000	ug/L	1.1	96.6	20	70 - 130
Toluene	MS	1619389-01	ND	23.011	25.000	ug/L		92.0		70 - 130
	MSD	1619389-01	ND	22.762	25.000	ug/L	1.1	91.0	20	70 - 130
Trichloroethene	MS	1619389-01	1.1410	24.131	25.000	ug/L		92.0		70 - 130
	MSD	1619389-01	1.1410	24.067	25.000	ug/L	0.3	91.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619389-01	ND	9.4100	10.000	ug/L		94.1		75 - 125
	MSD	1619389-01	ND	9.7400	10.000	ug/L	3.4	97.4		75 - 125
Toluene-d8 (Surrogate)	MS	1619389-01	ND	10.030	10.000	ug/L		100		80 - 120
	MSD	1619389-01	ND	9.9300	10.000	ug/L	1.0	99.3		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619389-01	ND	9.8200	10.000	ug/L		98.2		80 - 120
	MSD	1619389-01	ND	9.6800	10.000	ug/L	1.4	96.8		80 - 120

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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	BZG2256-BLK1	ND	ug/L	4.0	0.72	

**QC Batch ID: BZG2256**



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Ontario, CA 91761

**Reported:** 07/29/2016 8:36  
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**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BZG2256-BS1	LCS	9.9034	10.000	ug/L	99.0			85 - 115
<b>QC Batch ID: BZG2256</b>									



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**Reported:** 07/29/2016 8:36  
**Project:** Rialto Perchlorate - EDT  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2256</b>		Used client sample: N									
Perchlorate	DUP	1619385-02	55.058	56.858		ug/L	3.2		15		
	MS	1619385-02	55.058	110.70	50.505	ug/L		110		80 - 120	
	MSD	1619385-02	55.058	110.26	50.505	ug/L	0.4	109	15	80 - 120	



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**Reported:** 07/29/2016 8:36

Project: Rialto Perchlorate - EDT

Project Number: 2013-0100

Project Manager: Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/29/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100/2A  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619395  
Invoice ID: B241843

Enclosed are the results of analyses for samples received by the laboratory on 7/14/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## BC LABORATORIES, INC.

4100 Atlas Court □ Bakersfield, CA 93308  
 (661) 327-4911 □ FAX (661) 327-1918

## CHAIN OF CUSTODY

**Bill to:**  
**CRC**

**Address:**  
 9600 Ming Avenue, Suite 300  
 Bakersfield, CA 93311

**CC:** Ram Venkatesan

**Report Attention:**  
 Zachary Dransoff  
 661-412-5035 office  
 661-332-6294 cell

**TAT: 10 days**

**POET: 11115407 3027 0101020101**

**Notes:** Kern Front Extraction Wells  
 Quarterly Sampling

Sample Type:

(GW)

Ground-water

(S)

Soil

(WW)

Waste-water

(SL)

Sludge

Gas (g)

Water

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

x

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x

## Analysis Requested

Field pH, EC + T<sub>2mp</sub>(°F)

x

x

x

x

x

x

x

x

x

x

x

x

x

x

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x

x

x

x

x

x

x

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## Chain of Custody and Cooler Receipt Form for 1619395 Page 2 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page 1 Of 3	
Submission #: 16-16395											
SHIPPING INFORMATION				SHIPPING CONTAINER				FREE LIQUID			
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input type="checkbox"/>	NO <input type="checkbox"/>	W / S <input checked="" type="checkbox"/>	Other <input type="checkbox"/> (Specify) _____	Other <input type="checkbox"/> (Specify) _____
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____											
Custody Seals	Ice Chest <input checked="" type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>	Comments: _____							
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>									
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.97	Container: PE	Thermometer ID: 208	Date/Time 6-14-17 30							
	Temperature: (A) 0.1 °C / (C) 0.2 °C			Analyst Init ARL							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES				EF	EF						
4oz / 8oz / 16oz PE UNPRES											
2oz Cr <sup>6</sup>				O	O						
QT INORGANIC CHEMICAL METALS				GHI	GHI						
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz				J	J						
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL	096				ABC	ABC					
QT EPA 1664					K	K					
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 801SM											
QT EPA 8270	080				L	L					
8oz / 16oz / 32oz AMBER					MN	MAY					
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments: \_\_\_\_\_

Sample Numbering Completed By: ARL

A = Actual / C = Corrected

Date/Time: 6-14-16 1845

Rev 21 05/23/2016

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## Chain of Custody and Cooler Receipt Form for 1619395 Page 3 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page <u>2</u> Of <u>3</u>					
Submission #: <u>16-16395</u>															
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> <u>(W)</u> / S							
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments: _____													
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		None <input checked="" type="checkbox"/> Comments: _____									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u>		Container: <u>PE</u>		Thermometer ID: <u>208</u>		Date/Time <u>6-14 1730</u>							
		Temperature: (A) <u>2.9</u> °C		(C) <u>3.0</u> °C		Analyst Init <u>ARL</u>									
SAMPLE CONTAINERS			SAMPLE NUMBERS												
			1	2	3	4	5	6	7	8	9	10			
QT PE UNPRES			EF	EF											
4oz / 8oz / 16oz PE UNPRES															
2oz Cr <sup>6+</sup>			D	D											
QT INORGANIC CHEMICAL METALS			GHI	GHI											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz			J	J											
PT CYANIDE															
PT NITROGEN FORMS															
PT TOTAL SULFIDE															
2oz. NITRATE / NITRITE															
PT TOTAL ORGANIC CARBON															
PT CHEMICAL OXYGEN DEMAND															
PTA PHENOLICS															
40ml VOA VIAL TRAVEL BLANK															
40ml VOA VIAL	<u>096</u>		ABC	ABC											
QT EPA 1664			K	K											
PT ODOR															
RADIOLOGICAL															
BACTERIOLOGICAL															
40 ml VOA VIAL - 504															
QT EPA 508/608/8080															
QT EPA 515.1/8150															
QT EPA 525															
QT EPA 525 TRAVEL BLANK															
40ml EPA 547															
40ml EPA 531.1															
8oz EPA 548															
QT EPA 549															
QT EPA 8015M															
QT EPA 8270			L	L											
8oz / 16oz / 32oz AMBER			MN	MN											
8oz / 16oz / 32oz JAR															
SOIL SLEEVE															
PCB VIAL															
PLASTIC BAG															
TEDLAR BAG															
FERROUS IRON															
ENCORE															
SMART KIT															
SUMMA CANISTER															
Comments: _____															
Sample Numbering Completed By: <u>ARL</u>															
A = Actual / C = Corrected															
Date/Time: <u>6-14-16 1845</u>															
Rev 21 05/23/2016															
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## Chain of Custody and Cooler Receipt Form for 1619395 Page 4 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM								Page <u>3</u> Of <u>3</u>			
Submission #: <u>16-16395</u>													
SHIPPING INFORMATION										SHIPPING CONTAINER			
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____						FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W / S</u>			
Refrigerant:	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	None <input type="checkbox"/>	Other <input type="checkbox"/>	Comments: _____								
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>		Comments: _____								
All samples received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	All samples containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
COC Received	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	Emissivity:	<u>0.97</u>	Container:	<u>PE</u>	Thermometer ID:	<u>208</u>	Date/Time	<u>6-14-1730</u>	Analyst Init	<u>ARL</u>	
Temperature: (A)	<u>0.0</u>	°C	/ (C)	<u>0.1</u>	°C								
SAMPLE CONTAINERS		SAMPLE NUMBERS											
		1	2	3	4	5	6	7	8	9	10		
QT PE UNPRES		<u>EF</u>	<u>EF</u>										
4oz / 8oz / 16oz PE UNPRES													
2oz Cr <sup>6</sup>		<u>D</u>	<u>D</u>										
QT INORGANIC CHEMICAL METALS		<u>GHI</u>	<u>GHI</u>										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		<u>J</u>	<u>J</u>										
PT CYANIDE													
PT NITROGEN FORMS													
PT TOTAL SULFIDE													
2oz. NITRATE / NITRITE													
PT TOTAL ORGANIC CARBON													
PT CHEMICAL OXYGEN DEMAND													
PIA PHENOLICS													
40ml VOA VIAL TRAVEL BLANK													
40ml VOA VIAL	<u>096</u>	<u>ABC</u>	<u>ABC</u>										
QT EPA 1664		<u>K</u>	<u>K</u>										
PT ODOR													
RADIOLOGICAL													
BACTERIOLOGICAL													
40 ml VOA VIAL- 504													
QT EPA 508/608/8080													
QT EPA 515.1/8150													
QT EPA 525													
QT EPA 525 TRAVEL BLANK													
40ml EPA 547													
40ml EPA 531.1													
8oz EPA 548													
QT EPA 549													
QT EPA 8015M													
QT EPA 8270		<u>L</u>	<u>L</u>										
8oz / <u>16oz</u> / 32oz AMBER		<u>MN</u>	<u>MN</u>										
8oz / 16oz / 32oz JAR													
SOIL SLEEVE													
PCB VIAL													
PLASTIC BAG													
TEDLAR BAG													
FERROUS IRON													
ENCORE													
SMART KIT													
SUMMA CANISTER													

Comments: \_\_\_\_\_

Sample Numbering Completed By: ARL

A = Actual / C = Corrected

Date/Time: 6-14-16 1845 Rev 21 05/23/2016

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619395-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N1-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 16:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N6-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 15:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N10-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 11:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N10-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 11:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N11-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 12:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N-12 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 14:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619395-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N19-B <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55 <b>Sampling Date:</b> 07/13/2016 09:09 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619395-08	<b>COC Number:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55	<b>Sampling Date:</b> 07/13/2016 07:25	
	<b>Project Number:</b> ---	<b>Sample Depth:</b> ---	<b>Lab Matrix:</b> Water	
	<b>Sampling Location:</b> ---	<b>Sample Type:</b> Groundwater		
	<b>Sampling Point:</b> N19-C1			
	<b>Sampled By:</b> ---			
1619395-09	<b>COC Number:</b> ---	<b>Receive Date:</b> 07/14/2016 19:55	<b>Sampling Date:</b> 07/13/2016 06:45	
	<b>Project Number:</b> ---	<b>Sample Depth:</b> ---	<b>Lab Matrix:</b> Water	
	<b>Sampling Location:</b> ---	<b>Sample Type:</b> Groundwater		
	<b>Sampling Point:</b> N19-C2			
	<b>Sampled By:</b> ---			

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Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-01	Client Sample Name: N1-2, 7/13/2016 4:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-01	Client Sample Name:	N1-2, 7/13/2016 4:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>2.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-01	Client Sample Name:	N1-2, 7/13/2016 4:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 14:20	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-01	Client Sample Name: N1-2, 7/13/2016 4:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	4.7	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 18:14	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-02	Client Sample Name:	N6-4, 7/13/2016 3:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-02	Client Sample Name:	N6-4, 7/13/2016 3:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>2.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-02	Client Sample Name:	N6-4, 7/13/2016 3:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 14:42	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-02	Client Sample Name: N6-4, 7/13/2016 3:15:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	14	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 19:09	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-03	Client Sample Name: N10-2, 7/13/2016 11:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.70</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
<b>cis-1,2-Dichloroethene</b>	<b>0.098</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.31</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-03	Client Sample Name:	N10-2, 7/13/2016 11:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>8.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-03	Client Sample Name: N10-2, 7/13/2016 11:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 15:05	JMS	MS-V14	1	BZG1194

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Ontario, CA 91761

Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-03	Client Sample Name: N10-2, 7/13/2016 11:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	19	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 22:09	JSW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-04	Client Sample Name:	N10-4, 7/13/2016 11:05:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.38</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-04	Client Sample Name:	N10-4, 7/13/2016 11:05:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>3.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-04	Client Sample Name: N10-4, 7/13/2016 11:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 15:28	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-04	Client Sample Name: N10-4, 7/13/2016 11:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	13	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-314.0	07/27/16	07/27/16 20:05	EMW	IC6	1		BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-05	Client Sample Name:	N11-2, 7/13/2016 12:50:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-05	Client Sample Name:	N11-2, 7/13/2016 12:50:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>1.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-05	Client Sample Name: N11-2, 7/13/2016 12:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 15:51	JMS	MS-V14	1	BZG1194

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Ontario, CA 91761

Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-05	Client Sample Name: N11-2, 7/13/2016 12:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	11	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 20:18	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-06	Client Sample Name: N-12, 7/13/2016 2:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.34</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.33</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>1,1-Dichloroethane</b>	<b>0.34</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.58</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-06	Client Sample Name:	N-12, 7/13/2016 2:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
<b>Methyl t-butyl ether</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-06	Client Sample Name:	N-12, 7/13/2016 2:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 16:14	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-06	Client Sample Name: N-12, 7/13/2016 2:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	8.6	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 20:32	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-07	Client Sample Name:	N19-B, 7/13/2016 9:09:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-07	Client Sample Name:	N19-B, 7/13/2016 9:09:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>3.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-07	Client Sample Name: N19-B, 7/13/2016 9:09:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 16:37	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-07	Client Sample Name: N19-B, 7/13/2016 9:09:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.6	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 20:46	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-08	Client Sample Name: N19-C1, 7/13/2016 7:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-08	Client Sample Name:	N19-C1, 7/13/2016 7:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-08	Client Sample Name: N19-C1, 7/13/2016 7:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 17:00	JMS	MS-V14	1	BZG1194

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Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-08	Client Sample Name: N19-C1, 7/13/2016 7:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 21:00	EMW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-09	Client Sample Name:	N19-C2, 7/13/2016 6:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.32</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-09	Client Sample Name:	N19-C2, 7/13/2016 6:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.77</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>3.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619395-09	Client Sample Name: N19-C2, 7/13/2016 6:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/18/16 17:23	JMS	MS-V14	1	BZG1194

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Ontario, CA 91761

Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619395-09	Client Sample Name: N19-C2, 7/13/2016 6:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.9	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/27/16 21:14	JSW	IC6	1	BZG2416

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
Benzene	BZG1194-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1194-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1194-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1194-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
trans-1,3-Dichloropropene	BZG1194-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1194-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1194-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1194-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1194-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1194-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1194-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1194-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1194-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1194-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1194-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1194-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1194-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1194-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1194-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1194-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1194-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1194-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1194-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1194-BLK1	ND	ug/L	0.50	0.18	

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1194</b>						
2-Hexanone	BZG1194-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1194-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1194-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1194-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1194-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1194-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1194-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1194-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1194-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1194-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1194-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BLK1	97.2	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1194-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1194-BLK1	95.5	%	80 - 120 (LCL - UCL)		

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1194</b>									
Benzene	BZG1194-BS1	LCS	27.238	25.000	ug/L	109		70 - 130	
Bromodichloromethane	BZG1194-BS1	LCS	24.777	25.000	ug/L	99.1		70 - 130	
Chlorobenzene	BZG1194-BS1	LCS	27.062	25.000	ug/L	108		70 - 130	
Chloroethane	BZG1194-BS1	LCS	28.453	25.000	ug/L	114		70 - 130	
1,4-Dichlorobenzene	BZG1194-BS1	LCS	26.277	25.000	ug/L	105		70 - 130	
1,1-Dichloroethane	BZG1194-BS1	LCS	28.129	25.000	ug/L	113		70 - 130	
1,1-Dichloroethene	BZG1194-BS1	LCS	28.185	25.000	ug/L	113		70 - 130	
Toluene	BZG1194-BS1	LCS	26.363	25.000	ug/L	105		70 - 130	
Trichloroethene	BZG1194-BS1	LCS	27.925	25.000	ug/L	112		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1194-BS1	LCS	10.020	10.000	ug/L	100		75 - 125	
Toluene-d8 (Surrogate)	BZG1194-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1194-BS1	LCS	9.6000	10.000	ug/L	96.0		80 - 120	

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigator  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1194</b>		Used client sample: Y - Description: M-2 Port 4 (3610038-30), 07/12/2016 15:50									
Benzene	MS	1619389-01	ND	23.257	25.000	ug/L		93.0		70 - 130	
	MSD	1619389-01	ND	23.199	25.000	ug/L	0.2	92.8	20	70 - 130	
Bromodichloromethane	MS	1619389-01	ND	21.449	25.000	ug/L		85.8		70 - 130	
	MSD	1619389-01	ND	21.764	25.000	ug/L	1.5	87.1	20	70 - 130	
Chlorobenzene	MS	1619389-01	ND	22.926	25.000	ug/L		91.7		70 - 130	
	MSD	1619389-01	ND	22.498	25.000	ug/L	1.9	90.0	20	70 - 130	
Chloroethane	MS	1619389-01	ND	24.023	25.000	ug/L		96.1		70 - 130	
	MSD	1619389-01	ND	24.466	25.000	ug/L	1.8	97.9	20	70 - 130	
1,4-Dichlorobenzene	MS	1619389-01	ND	22.191	25.000	ug/L		88.8		70 - 130	
	MSD	1619389-01	ND	21.971	25.000	ug/L	1.0	87.9	20	70 - 130	
1,1-Dichloroethane	MS	1619389-01	0.25000	24.417	25.000	ug/L		96.7		70 - 130	
	MSD	1619389-01	0.25000	24.555	25.000	ug/L	0.6	97.2	20	70 - 130	
1,1-Dichloroethene	MS	1619389-01	ND	23.880	25.000	ug/L		95.5		70 - 130	
	MSD	1619389-01	ND	24.151	25.000	ug/L	1.1	96.6	20	70 - 130	
Toluene	MS	1619389-01	ND	23.011	25.000	ug/L		92.0		70 - 130	
	MSD	1619389-01	ND	22.762	25.000	ug/L	1.1	91.0	20	70 - 130	
Trichloroethene	MS	1619389-01	1.1410	24.131	25.000	ug/L		92.0		70 - 130	
	MSD	1619389-01	1.1410	24.067	25.000	ug/L	0.3	91.7	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1619389-01	ND	9.4100	10.000	ug/L		94.1		75 - 125	
	MSD	1619389-01	ND	9.7400	10.000	ug/L	3.4	97.4		75 - 125	
Toluene-d8 (Surrogate)	MS	1619389-01	ND	10.030	10.000	ug/L		100		80 - 120	
	MSD	1619389-01	ND	9.9300	10.000	ug/L	1.0	99.3		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1619389-01	ND	9.8200	10.000	ug/L		98.2		80 - 120	
	MSD	1619389-01	ND	9.6800	10.000	ug/L	1.4	96.8		80 - 120	

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**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG2416</b>						
Perchlorate	BZG2416-BLK1	ND	ug/L	4.0	0.72	



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Ontario, CA 91761

Reported: 07/29/2016 23:02  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
Perchlorate	BZG2416-BS1	LCS	10.169	10.000	ug/L	102		85 - 115	
<b>QC Batch ID: BZG2416</b>									



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Ontario, CA 91761

**Reported:** 07/29/2016 23:02  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2416</b>		Used client sample: Y - Description: N1-2, 07/13/2016 16:00									
Perchlorate	DUP	1619395-01	4.6596	4.7342		ug/L	1.6		15		
	MS	1619395-01	4.6596	16.158	10.101	ug/L		114		80 - 120	
	MSD	1619395-01	4.6596	15.914	10.101	ug/L	1.5	111	15	80 - 120	



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Ontario, CA 91761

**Reported:** 07/29/2016 23:02

Project: Rialto Perchlorate Investigatlon

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 07/29/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100/2A  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619529  
Invoice ID: B241844

Enclosed are the results of analyses for samples received by the laboratory on 7/15/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody Form

BC Laboratories, Inc. - 4100 Atlas Ct. - Bakersfield, CA 93308 - 661.321.9181 - Fax: 661.321.9181 - [www.bclabs.com](http://www.bclabs.com)



## Chain of Custody and Cooler Receipt Form for 1619529 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page <u>1</u> Of <u>1</u>			
Submission #: <u>16-19529</u>											
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> W / S				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>				Comments:							
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:							
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
<b>COC Received</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Emissivity: <u>0.97</u>		Container: <u>PE</u>		Thermometer ID: <u>208</u>		Date/Time <u>7-15 1830</u>			
		Temperature: (A) <u>0.3</u> °C / (C) <u>0.4</u> °C		Analyst Init <u>ARL</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / <del>6oz</del> 16oz PE UNPRES	D	D	D	D	D	D	D				
2oz Cr <sup>6</sup>											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL	ABC	ABC	ABC	ABC	ABC	ABC	ABC				
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL-504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
OT EPA 549											
OT EPA 8015M											
OT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments: \_\_\_\_\_

Sample Numbering Completed By: KIB

A = Actual / C = Corrected

Date/Time: 7/15/162042

Rev 21 05/23/2016

(S:\WPDoc\WordPerfect\LAB\_DOCS\FORMS\ISAMRECRev 20)



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619529-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> F6A-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 14:35 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N2-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 09:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N-5 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 08:37 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N7-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 16:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> B-14 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 13:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> B-23S <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 11:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619529-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> B-23d <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 12:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-01	Client Sample Name: F6A-2, 7/14/2016 2:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND	J	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-01	Client Sample Name:	F6A-2, 7/14/2016 2:35:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
<b>Methyl t-butyl ether</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-01	Client Sample Name: F6A-2, 7/14/2016 2:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 01:24	JMS	MS-V14	1	BZG1307

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 07/29/2016 23:03  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619529-01	Client Sample Name: F6A-2, 7/14/2016 2:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/28/16 00:41	OLH	IC6	1	BZG2423

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-02	Client Sample Name:	N2-2, 7/14/2016 9:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-02	Client Sample Name:	N2-2, 7/14/2016 9:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-02	Client Sample Name:	N2-2, 7/14/2016 9:45:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 01:47	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 23:03  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619529-02	Client Sample Name: N2-2, 7/14/2016 9:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/28/16 01:37	OLH	IC6	1	BZG2423

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-03	Client Sample Name: N-5, 7/14/2016 8:37:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-03	Client Sample Name:	N-5, 7/14/2016 8:37:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.094</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-03	Client Sample Name: N-5, 7/14/2016 8:37:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 02:10	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 23:03  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619529-03	Client Sample Name: N-5, 7/14/2016 8:37:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/27/16	07/28/16 01:51	OLH	IC6	1		BZG2423

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Reported: 07/29/2016 23:03

Project: Rialto Perchlorate Investigation

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-04	Client Sample Name:	N7-4, 7/14/2016 4:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
<b>Chloromethane</b>	<b>0.35</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	J	1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	J	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-04	Client Sample Name:	N7-4, 7/14/2016 4:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.54</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619529-04	Client Sample Name:	N7-4, 7/14/2016 4:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/18/16	07/19/16 02:33	JMS	MS-V14	1	BZG1307

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Reported: 07/29/2016 23:03  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100/2A  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619529-04	Client Sample Name: N7-4, 7/14/2016 4:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.4	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/27/16	07/28/16 02:04	OLH	IC6	1	BZG2423

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
Benzene	BZG1307-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1307-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1307-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1307-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1307-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1307-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1307-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1307-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1307-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
trans-1,3-Dichloropropene	BZG1307-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1307-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1307-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1307-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1307-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1307-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1307-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1307-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1307-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1307-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1307-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1307-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1307-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1307-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1307-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1307-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1307-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1307-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1307-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1307-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1307-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1307</b>						
2-Hexanone	BZG1307-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1307-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1307-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1307-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1307-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1307-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1307-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1307-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1307-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1307-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1307-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1307-BLK1	96.9	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1307-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1307-BLK1	95.2	%	80 - 120 (LCL - UCL)		

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1307</b>									
Benzene	BZG1307-BS1	LCS	26.432	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BZG1307-BS1	LCS	24.594	25.000	ug/L	98.4		70 - 130	
Chlorobenzene	BZG1307-BS1	LCS	26.461	25.000	ug/L	106		70 - 130	
Chloroethane	BZG1307-BS1	LCS	26.825	25.000	ug/L	107		70 - 130	
1,4-Dichlorobenzene	BZG1307-BS1	LCS	26.044	25.000	ug/L	104		70 - 130	
1,1-Dichloroethane	BZG1307-BS1	LCS	27.361	25.000	ug/L	109		70 - 130	
1,1-Dichloroethene	BZG1307-BS1	LCS	27.047	25.000	ug/L	108		70 - 130	
Toluene	BZG1307-BS1	LCS	25.742	25.000	ug/L	103		70 - 130	
Trichloroethene	BZG1307-BS1	LCS	26.996	25.000	ug/L	108		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BZG1307-BS1	LCS	9.9000	10.000	ug/L	99.0		75 - 125	
Toluene-d8 (Surrogate)	BZG1307-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120	
4-Bromofluorobenzene (Surrogate)	BZG1307-BS1	LCS	9.5300	10.000	ug/L	95.3		80 - 120	

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Reported: 07/29/2016 23:03

Project: Rialto Perchlorate Investigator

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1307</b>		Used client sample: Y - Description: M-5 Port 7 (3610038-710), 07/13/2016 09:55								
Benzene	MS	1619392-07	ND	22.985	25.000	ug/L		91.9		70 - 130
	MSD	1619392-07	ND	23.024	25.000	ug/L	0.2	92.1	20	70 - 130
Bromodichloromethane	MS	1619392-07	ND	21.292	25.000	ug/L		85.2		70 - 130
	MSD	1619392-07	ND	21.739	25.000	ug/L	2.1	87.0	20	70 - 130
Chlorobenzene	MS	1619392-07	ND	23.092	25.000	ug/L		92.4		70 - 130
	MSD	1619392-07	ND	22.644	25.000	ug/L	2.0	90.6	20	70 - 130
Chloroethane	MS	1619392-07	ND	23.645	25.000	ug/L		94.6		70 - 130
	MSD	1619392-07	ND	23.532	25.000	ug/L	0.5	94.1	20	70 - 130
1,4-Dichlorobenzene	MS	1619392-07	ND	22.637	25.000	ug/L		90.5		70 - 130
	MSD	1619392-07	ND	22.253	25.000	ug/L	1.7	89.0	20	70 - 130
1,1-Dichloroethane	MS	1619392-07	ND	23.590	25.000	ug/L		94.4		70 - 130
	MSD	1619392-07	ND	24.035	25.000	ug/L	1.9	96.1	20	70 - 130
1,1-Dichloroethene	MS	1619392-07	ND	23.690	25.000	ug/L		94.8		70 - 130
	MSD	1619392-07	ND	23.674	25.000	ug/L	0.1	94.7	20	70 - 130
Toluene	MS	1619392-07	ND	22.536	25.000	ug/L		90.1		70 - 130
	MSD	1619392-07	ND	22.653	25.000	ug/L	0.5	90.6	20	70 - 130
Trichloroethene	MS	1619392-07	ND	22.904	25.000	ug/L		91.6		70 - 130
	MSD	1619392-07	ND	22.982	25.000	ug/L	0.3	91.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619392-07	ND	9.5200	10.000	ug/L		95.2		75 - 125
	MSD	1619392-07	ND	9.7900	10.000	ug/L	2.8	97.9		75 - 125
Toluene-d8 (Surrogate)	MS	1619392-07	ND	9.9200	10.000	ug/L		99.2		80 - 120
	MSD	1619392-07	ND	10.080	10.000	ug/L	1.6	101		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619392-07	ND	9.9000	10.000	ug/L		99.0		80 - 120
	MSD	1619392-07	ND	9.6100	10.000	ug/L	3.0	96.1		80 - 120

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**Reported:** 07/29/2016 23:03  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	BZG2423-BLK1	ND	ug/L	4.0	0.72	

**QC Batch ID: BZG2423**



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**Reported:** 07/29/2016 23:03  
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**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	<u>Control Limits</u>		Lab Quals
								Percent Recovery	RPD	
Perchlorate	BZG2423-BS1	LCS	11.236	10.000	ug/L	112		85 - 115		



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**Reported:** 07/29/2016 23:03  
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**Project Number:** 2013-0100/2A  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2423</b>		Used client sample: Y - Description: F6A-2, 07/14/2016 14:35									
Perchlorate	DUP	1619529-01	ND	ND		ug/L			15		
	MS	1619529-01	ND	10.647	10.101	ug/L		105		80 - 120	
	MSD	1619529-01	ND	11.031	10.101	ug/L	3.5	109	15	80 - 120	



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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 07/29/2016 23:03

Project: Rialto Perchlorate Investigatlon

Project Number: 2013-0100/2A

Project Manager: Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 08/01/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619564  
Invoice ID: B241949

Enclosed are the results of analyses for samples received by the laboratory on 7/15/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## **Chain of Custody Form**

Report To:		Client: Geological Associates		Project #: 013-0100		Page _____ of _____																																																																	
Attn:	Ralph Murphy	Project Name:	Rig 16																																																																				
Street Address:	777 E. Guadalupe Rd.	Comments:																																																																					
City, State, Zip:	Toronto, CA 91761	Sampler(s): B. Saling																																																																					
Phone:	(609) 626-2282 ext. 626-1233	M. Campbell																																																																					
Email:																																																																							
Work Order #:	10-19504	Date Sampled	Time Sampled																																																																				
Sample #	Description																																																																						
-1	N 20-3	7/14/16	11:15	X	X																																																																		
-2	N 20-1		11:55	X	X																																																																		
-3	M 8-7		12:05	X	X																																																																		
-4	M 8-6		13:35	X	X																																																																		
-5	M 8-5		14:00	X	X																																																																		
-6	QCATB		-	X	X																																																																		
-7	QCTB		-	X	X																																																																		
<table border="1"> <thead> <tr> <th colspan="2">Sample Matrix</th> <th colspan="2">Result Request</th> <th colspan="2">**Surcharge</th> </tr> </thead> <tbody> <tr> <td>Soil</td> <td></td> <td>STD</td> <td><input checked="" type="checkbox"/></td> <td>5 Day*</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Ground Water</td> <td></td> <td>2 Day*</td> <td><input type="checkbox"/></td> <td>1 Day**</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Drinking Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Waste Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								Sample Matrix		Result Request		**Surcharge		Soil		STD	<input checked="" type="checkbox"/>	5 Day*	<input type="checkbox"/>	Ground Water		2 Day*	<input type="checkbox"/>	1 Day**	<input type="checkbox"/>	Drinking Water						Waste Water						Other																																	
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BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com																																																																							

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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

## Chain of Custody and Cooler Receipt Form for 1619564 Page 2 of 2

RIES INC.		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>							
#: 16-19564											
SHIPPING INFORMATION		SHIPPING CONTAINER		FREE LIQUID							
<input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> <input checked="" type="checkbox"/> Field Service <input type="checkbox"/> Other (Specify) _____		<input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> <input type="checkbox"/> Other (Specify) _____		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W / S</u>							
Refrigerant: <input checked="" type="checkbox"/> Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments:									
Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input type="checkbox"/>		Comments:									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.97</u>	Container: <u>PE</u>	Thermometer ID: <u>208</u>	Date/Time <u>7-15 1830</u>							
	Temperature: (A) <u>0.8</u> °C / (C) <u>0.9</u> °C			Analyst Init <u>ARL</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>					
4oz / 8oz / 16oz PE UNPRES											
2oz Cr <sup>6</sup>											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PTA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL		<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>	<u>A</u> <u>B</u>
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/608/8080											
QT EPA 515.1/8150											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments: -2 only received 2 vials											
Sample Numbering Completed By: <u>KXG</u>											
A = Actual / C = Corrected											
Date/Time: <u>7-18-16 0830</u>											
Rev 21 05/23/2016											
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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619564-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N20-3 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 11:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619564-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N20-1 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 11:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619564-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-7 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 13:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619564-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-6 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 13:35 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619564-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-5 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 14:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619564-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCAB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water		
1619564-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCTB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/15/2016 18:20 <b>Sampling Date:</b> 07/14/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-01	Client Sample Name: N20-3, 7/14/2016 11:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-01	Client Sample Name: N20-3, 7/14/2016 11:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.45</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-01	Client Sample Name: N20-3, 7/14/2016 11:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 12:03	JMS	MS-V14	1	BZG1308

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619564-01	Client Sample Name: N20-3, 7/14/2016 11:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/29/16	07/29/16 23:44	EMW	IC6	1	BZG2665

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-02	Client Sample Name: N20-1, 7/14/2016 11:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-02	Client Sample Name:	N20-1, 7/14/2016 11:55:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>9.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.73</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-02	Client Sample Name: N20-1, 7/14/2016 11:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 12:25	JMS	MS-V14	1	BZG1308

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619564-02	Client Sample Name: N20-1, 7/14/2016 11:55:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/29/16	07/30/16 00:40	EMW	IC6	1	BZG2665

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-03	Client Sample Name:	M8-7, 7/14/2016 1:05:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-03	Client Sample Name:	M8-7, 7/14/2016 1:05:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.40</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-03	Client Sample Name: M8-7, 7/14/2016 1:05:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 12:48	JMS	MS-V14	1	BZG1308

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619564-03	Client Sample Name: M8-7, 7/14/2016 1:05:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/29/16	07/30/16 00:54	EMW	IC6	1	BZG2665

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-04	Client Sample Name:	M8-6, 7/14/2016 1:35:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-04	Client Sample Name:	M8-6, 7/14/2016 1:35:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.43</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-04	Client Sample Name: M8-6, 7/14/2016 1:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 13:11	JMS	MS-V14	1	BZG1308

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619564-04	Client Sample Name: M8-6, 7/14/2016 1:35:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/29/16	07/30/16 01:35	EMW	IC6	1	BZG2665

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-05	Client Sample Name:	M8-5, 7/14/2016 2:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-05	Client Sample Name:	M8-5, 7/14/2016 2:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.96</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-05	Client Sample Name: M8-5, 7/14/2016 2:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 13:34	JMS	MS-V14	1	BZG1308

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619564-05	Client Sample Name: M8-5, 7/14/2016 2:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	07/29/16	07/30/16 01:49	EMW	IC6	1	BZG2665

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-06	Client Sample Name:	QCAB, 7/14/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-06	Client Sample Name:	QCAB, 7/14/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-06	Client Sample Name:	QCAB, 7/14/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 13:57	JMS	MS-V14	1	BZG1308

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-07	Client Sample Name:	QCTB, 7/14/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-07	Client Sample Name:	QCTB, 7/14/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatigon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619564-07	Client Sample Name: QCTB, 7/14/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/19/16	07/20/16 14:20	JMS	MS-V14	1	BZG1308

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1308</b>						
Benzene	BZG1308-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1308-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1308-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1308-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1308-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1308-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1308-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1308-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1308-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.14	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1308</b>						
trans-1,3-Dichloropropene	BZG1308-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1308-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1308-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1308-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1308-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1308-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1308-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1308-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1308-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1308-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1308-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1308-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1308-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1308-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1308-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1308-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1308-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1308-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1308-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1308-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1308-BLK1	ND	ug/L	0.50	0.18	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1308</b>						
2-Hexanone	BZG1308-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1308-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1308-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1308-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1308-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1308-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1308-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1308-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1308-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1308-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1308-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1308-BLK1	97.8	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1308-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1308-BLK1	96.1	%	80 - 120 (LCL - UCL)		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1308</b>									
Benzene	BZG1308-BS1	LCS	24.511	25.000	ug/L	98.0	70 - 130		
Bromodichloromethane	BZG1308-BS1	LCS	22.797	25.000	ug/L	91.2	70 - 130		
Chlorobenzene	BZG1308-BS1	LCS	24.247	25.000	ug/L	97.0	70 - 130		
Chloroethane	BZG1308-BS1	LCS	24.743	25.000	ug/L	99.0	70 - 130		
1,4-Dichlorobenzene	BZG1308-BS1	LCS	23.492	25.000	ug/L	94.0	70 - 130		
1,1-Dichloroethane	BZG1308-BS1	LCS	25.574	25.000	ug/L	102	70 - 130		
1,1-Dichloroethene	BZG1308-BS1	LCS	25.037	25.000	ug/L	100	70 - 130		
Toluene	BZG1308-BS1	LCS	23.684	25.000	ug/L	94.7	70 - 130		
Trichloroethene	BZG1308-BS1	LCS	25.232	25.000	ug/L	101	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG1308-BS1	LCS	9.6300	10.000	ug/L	96.3	75 - 125		
Toluene-d8 (Surrogate)	BZG1308-BS1	LCS	9.9100	10.000	ug/L	99.1	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG1308-BS1	LCS	9.7000	10.000	ug/L	97.0	80 - 120		

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigator  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1308</b>		Used client sample: Y - Description: M-5 Port 5 (3610038-708), 07/13/2016 10:55								
Benzene	MS	1619392-05	ND	23.985	25.000	ug/L		95.9		70 - 130
	MSD	1619392-05	ND	24.136	25.000	ug/L	0.6	96.5	20	70 - 130
Bromodichloromethane	MS	1619392-05	ND	22.345	25.000	ug/L		89.4		70 - 130
	MSD	1619392-05	ND	22.505	25.000	ug/L	0.7	90.0	20	70 - 130
Chlorobenzene	MS	1619392-05	ND	23.735	25.000	ug/L		94.9		70 - 130
	MSD	1619392-05	ND	23.256	25.000	ug/L	2.0	93.0	20	70 - 130
Chloroethane	MS	1619392-05	ND	24.443	25.000	ug/L		97.8		70 - 130
	MSD	1619392-05	ND	24.692	25.000	ug/L	1.0	98.8	20	70 - 130
1,4-Dichlorobenzene	MS	1619392-05	ND	23.344	25.000	ug/L		93.4		70 - 130
	MSD	1619392-05	ND	22.714	25.000	ug/L	2.7	90.9	20	70 - 130
1,1-Dichloroethane	MS	1619392-05	ND	24.954	25.000	ug/L		99.8		70 - 130
	MSD	1619392-05	ND	25.177	25.000	ug/L	0.9	101	20	70 - 130
1,1-Dichloroethene	MS	1619392-05	ND	24.452	25.000	ug/L		97.8		70 - 130
	MSD	1619392-05	ND	24.865	25.000	ug/L	1.7	99.5	20	70 - 130
Toluene	MS	1619392-05	ND	23.571	25.000	ug/L		94.3		70 - 130
	MSD	1619392-05	ND	23.747	25.000	ug/L	0.7	95.0	20	70 - 130
Trichloroethene	MS	1619392-05	ND	23.870	25.000	ug/L		95.5		70 - 130
	MSD	1619392-05	ND	24.236	25.000	ug/L	1.5	96.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619392-05	ND	9.6100	10.000	ug/L		96.1		75 - 125
	MSD	1619392-05	ND	9.5900	10.000	ug/L	0.2	95.9		75 - 125
Toluene-d8 (Surrogate)	MS	1619392-05	ND	9.9400	10.000	ug/L		99.4		80 - 120
	MSD	1619392-05	ND	10.010	10.000	ug/L	0.7	100		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619392-05	ND	9.8000	10.000	ug/L		98.0		80 - 120
	MSD	1619392-05	ND	9.5400	10.000	ug/L	2.7	95.4		80 - 120

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Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatiton  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	QC Batch ID: BZG2665 BZG2665-BLK1	ND	ug/L	4.0	0.72	



Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BZG2665	BZG2665-BS1	LCS	11.148	10.000	ug/L	111	85 - 115	

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Reported: 08/01/2016 22:05  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG2665</b>		Used client sample: Y - Description: N20-3, 07/14/2016 11:15									
Perchlorate	DUP	1619564-01	ND	ND		ug/L			15		
	MS	1619564-01	ND	10.075	10.101	ug/L		99.7		80 - 120	
	MSD	1619564-01	ND	10.044	10.101	ug/L	0.3	99.4	15	80 - 120	



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**Reported:** 08/01/2016 22:05  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 08/04/2016

Ralph Murphy

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100  
BCL Project: Rialto Perchlorate Investigaton  
BCL Work Order: 1619851  
Invoice ID: B242331

Enclosed are the results of analyses for samples received by the laboratory on 7/19/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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## Chain of Custody Form

Report To:	Geologic Associates			Project #: 2013-01 G0
Client:	Ralph Murphy			Project Name: Rialto
Attn:	Street Address: 2777 E. 6th St.			Percholate
City, State, Zip:		Ontario, Ca 91761		Sampler(s): B. Schneid
Phone:		626 - 2292 Ext: 626 - 1233		M - Campbell
Email: 14-1985				
Work Order #:	Sample #	Description	Date Sampled	Time Sampled
	-1	M7-7	7/18/16	07:47
	-2	M7-6	08:25	
	-3	M7-5	08:58	
	-4	M7-4	09:48	
	-5	M7-3	10:19	
	-6	M7-2	10:46	
	-7	M7-1	11:16	
	-8	M8-4	12:23	
	-9	M8-3	12:50	
	-10	M8-2	13:15	
	-11	M8-1	13:46	
	-12	QCAF3	—	
	-13	QCTB	—	
<input checked="" type="checkbox"/> Same as above		EDF Required?	Global (Needed)	
<input checked="" type="checkbox"/> Yes		<input type="checkbox"/> No	1. Relinquish <u>Zach</u>	
<input type="checkbox"/> Send Copy to State of CA? (EDT)		<input type="checkbox"/> 2. Relinquish		
<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No		3. Relinquish
Billing	Client:			
Address:				
City:	State	Zip		
Attn:				

Analysis Requested						Comments:																																																																																																																			
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Client: Geologic Associates		Project #: 2013-01-00																																																																																																																							
Attn: Ralph Murphy		Project Name: Rita HC																																																																																																																							
Street Address: 2772 E. 64th St.		Perchicalo																																																																																																																							
City, State, Zip: Ontario, CA 91761		Sampler(s): B. Schinca																																																																																																																							
Phone: 626-2222 Fax: 626-1233		M - Campbell																																																																																																																							
<table border="1"> <tr> <td colspan="2">Sample Matrix</td> <td colspan="2">Result Request</td> <td colspan="2">**Surcharge</td> </tr> <tr> <td colspan="2"> <input checked="" type="checkbox"/> Log  <input checked="" type="checkbox"/> D.O.  <input checked="" type="checkbox"/> H.C.C.  <input type="checkbox"/> Other         </td> <td colspan="2"> <input checked="" type="checkbox"/> STD  <input type="checkbox"/> 5 Day*  <input type="checkbox"/> 2 Day**  <input type="checkbox"/> 1 Day*       </td> <td colspan="2"></td> </tr> <tr> <td colspan="8">           Soil            Sludge            Ground Water            Drinking Water            Waste Water            Other         </td> </tr> </table>								Sample Matrix		Result Request		**Surcharge		<input checked="" type="checkbox"/> Log <input checked="" type="checkbox"/> D.O. <input checked="" type="checkbox"/> H.C.C. <input type="checkbox"/> Other		<input checked="" type="checkbox"/> STD <input type="checkbox"/> 5 Day* <input type="checkbox"/> 2 Day** <input type="checkbox"/> 1 Day*				Soil Sludge Ground Water Drinking Water Waste Water Other																																																																																																					
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Work Order #: U-1915																																																																																																																									
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-1	M7-7	7/18/16	0747	X	X	X	X																																																																																																																		
-2	M7-6		0825	X	X	X	X																																																																																																																		
-3	M7-5		0858	X	X	X	X																																																																																																																		
-4	M7-4		0948	X	X	X	X																																																																																																																		
-5	M7-3		10:19	X	X	X	X																																																																																																																		
-6	M7-2		10:46	X	X	X	X																																																																																																																		
-7	M7-1		11:16	X	X	X	X																																																																																																																		
-8	M8-4		12:23	X	X	X	X																																																																																																																		
-9	M8-3		12:50	X	X	X	X																																																																																																																		
-10	M8-2		13:15	X	X	X	X																																																																																																																		
-11	M8-1		13:46	X	X	X	X																																																																																																																		
-12	QCATP		-	-	-	-	-																																																																																																																		
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## Chain of Custody and Cooler Receipt Form for 1619851 Page 2 of 3

ORIES INC.		COOLER RECEIPT FORM								Page <u>1</u> Of <u>2</u>			
Job #: <u>1619851</u>													
<b>SHIPPING INFORMATION</b> <input type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> <input checked="" type="checkbox"/> Lab Field Service <input type="checkbox"/> Other (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W / S</u>					
Refrigerant: <input checked="" type="checkbox"/> Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>													
All samples received? Yes <input type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>									
<input checked="" type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>2086</u> Temperature: (A) <u>1.4</u> °C / (C) <u>1.7</u> °C		Date/Time <u>7/19/16 1846</u> Analyst Init <u>M</u>									
SAMPLE CONTAINERS		SAMPLE NUMBERS											
		1	2	3	4	5	6	7	8	9	10		
QT PE UNPRES		D	D	D	D	D	D	D	D	D			
4oz / 8oz / 16oz PE UNPRES													
2oz Cr <sup>6+</sup>													
QT INORGANIC CHEMICAL METALS													
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz													
PT CYANIDE													
PT NITROGEN FORMS													
PT TOTAL SULFIDE													
2oz NITRATE / NITRITE													
PT TOTAL ORGANIC CARBON													
PT CHEMICAL OXYGEN DEMAND													
PTA PHENOLICS													
40ml VOA VIAL TRAVEL BLANK													
40ml VOA VIAL	<u>ABC</u>	<u>ABC</u>	<u>MBC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>			
QT EPA 1664													
PT ODOR													
RADIOLOGICAL													
BACTERIOLOGICAL													
40 ml VOA VIAL- 504													
QT EPA 508/608/8080													
QT EPA 515.1/8150													
QT EPA 525													
QT EPA 525 TRAVEL BLANK													
40ml EPA 547													
40ml EPA 531.1													
8oz EPA 548													
QT EPA 549													
QT EPA 8015M													
QT EPA 8270													
8oz / 16oz / 32oz AMBER													
8oz / 16oz / 32oz JAR													
SOIL SLEEVE													
PCB VIAL													
PLASTIC BAG													
TEDLAR BAG													
FERROUS IRON													
ENCORE													
SMART KIT													
SUMMA CANISTER													
Comments:													
Sample Numbering Completed By: <u>JPL</u>	Date/Time: <u>7-20-16 0920</u>												
<input checked="" type="checkbox"/> A = Actual / <input type="checkbox"/> C = Corrected	Rev 21 05/23/2016												
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BC

Laboratories, Inc.

Environmental Testing Laboratory Since 1949

## Chain of Custody and Cooler Receipt Form for 1619851 Page 3 of 3

SHIPPING INFORMATION		COOLER RECEIPT FORM		Page 2 Of 2						
Carrier: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		Shipping Container: Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		Free Liquid: YES <input type="checkbox"/> NO <input type="checkbox"/> <input checked="" type="checkbox"/> W S						
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> All samples containers intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>PE</u> Thermometer ID: <u>2086</u> Temperature: (A) <u>14</u> °C / (C) <u>17</u> °C	Date/Time: <u>7.19.16 1846</u> Analyst Init: <u>JL</u>							
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz/8oz/16oz PE UNPRES										
2oz CT										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz/8oz/16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	<u>094</u>									
40ml VOA VIAL	<u>096</u>	<u>AMB</u>	<u>AMB</u>							
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
1oz/16oz/32oz AMBER										
1oz/16oz/32oz JAR										
OIL SLEEVE										
CB VIAL										
LASTIC BAG										
EDLAR BAG										
ERROUS IRON										
NCORE										
MART KIT										
MMA CANISTER										
Comments: _____										
Sample Numbering Completed By: <u>JL</u>			Date/Time: <u>7.20.16</u>		<u>0920</u>				Rev 21 05/23/2016	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619851-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-7 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 07:47 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-6 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 08:25 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-5 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 08:58 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 09:48 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-05	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-3 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 10:19 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-06	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 10:46 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-07	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M7-1 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 11:16 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619851-08	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 12:23 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-09	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-3 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 12:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-10	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-2 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 13:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-11	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> M8-1 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 13:46 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-12	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCAB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/18/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619851-13	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCTB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/19/2016 18:45 <b>Sampling Date:</b> 07/19/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Trip Blank		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-01	Client Sample Name:	M7-7, 7/18/2016 7:47:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.77</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-01	Client Sample Name:	M7-7, 7/18/2016 7:47:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
<b>Toluene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
<b>Trichlorofluoromethane</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-01	Client Sample Name: M7-7, 7/18/2016 7:47:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 01:02	JMS	MS-V14	1	BZG1764

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-01	Client Sample Name: M7-7, 7/18/2016 7:47:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 14:31	EMW	IC6	1	BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-02	Client Sample Name:	M7-6, 7/18/2016 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>0.28</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-02	Client Sample Name:	M7-6, 7/18/2016 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>Trichlorofluoromethane</b>	<b>0.48</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-02	Client Sample Name:	M7-6, 7/18/2016 8:25:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 01:25	JMS	MS-V14	1	BZG1764

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-02	Client Sample Name: M7-6, 7/18/2016 8:25:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 15:26	EMW	IC6	1	BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-03	Client Sample Name:	M7-5, 7/18/2016 8:58:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.55</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-03	Client Sample Name:	M7-5, 7/18/2016 8:58:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>Trichlorofluoromethane</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-03	Client Sample Name:	M7-5, 7/18/2016 8:58:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 01:48	JMS	MS-V14	1	BZG1764

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-03	Client Sample Name: M7-5, 7/18/2016 8:58:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 15:40	EMW	IC6	1	BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-04	Client Sample Name:	M7-4, 7/18/2016 9:48:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>0.48</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>1,1-Dichloroethane</b>	<b>0.33</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-04	Client Sample Name:	M7-4, 7/18/2016 9:48:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>3.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>Trichlorofluoromethane</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-04	Client Sample Name:	M7-4, 7/18/2016 9:48:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 02:11	JMS	MS-V14	1	BZG1764

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-04	Client Sample Name: M7-4, 7/18/2016 9:48:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	08/01/16	08/01/16 16:22	EMW	IC6	1		BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-05	Client Sample Name:	M7-3, 7/18/2016 10:19:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.39</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.24</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-05	Client Sample Name: M7-3, 7/18/2016 10:19:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-05	Client Sample Name: M7-3, 7/18/2016 10:19:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 02:35	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-05	Client Sample Name: M7-3, 7/18/2016 10:19:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	08/01/16	08/01/16 22:40	TMS	IC6	1		BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-06	Client Sample Name:	M7-2, 7/18/2016 10:46:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>1.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>0.60</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-06	Client Sample Name:	M7-2, 7/18/2016 10:46:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>6.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.41</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
<b>Trichlorofluoromethane</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-06	Client Sample Name:	M7-2, 7/18/2016 10:46:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 02:58	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-06	Client Sample Name: M7-2, 7/18/2016 10:46:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	08/01/16	08/02/16 10:19	OLH	IC6	1		BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-07	Client Sample Name:	M7-1, 7/18/2016 11:16:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>0.83</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-07	Client Sample Name:	M7-1, 7/18/2016 11:16:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.095</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>7.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.54</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.94</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-07	Client Sample Name: M7-1, 7/18/2016 11:16:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 03:21	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-07	Client Sample Name: M7-1, 7/18/2016 11:16:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.1	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 16:49	EMW	IC6	1	BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-08	Client Sample Name:	M8-4, 7/18/2016 12:23:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-08	Client Sample Name:	M8-4, 7/18/2016 12:23:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.085</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-08	Client Sample Name:	M8-4, 7/18/2016 12:23:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 03:45	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-08	Client Sample Name: M8-4, 7/18/2016 12:23:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	08/01/16	08/02/16 10:33	OLH	IC6	1		BZH0123

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-09	Client Sample Name:	M8-3, 7/18/2016 12:50:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-09	Client Sample Name:	M8-3, 7/18/2016 12:50:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-09	Client Sample Name: M8-3, 7/18/2016 12:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 04:09	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-09	Client Sample Name: M8-3, 7/18/2016 12:50:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	0.78	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 17:03	EMW	IC6	1	BZH0123

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-10	Client Sample Name:	M8-2, 7/18/2016 1:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	<b>1</b>
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-10	Client Sample Name:	M8-2, 7/18/2016 1:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.6</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-10	Client Sample Name:	M8-2, 7/18/2016 1:15:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 04:33	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-10	Client Sample Name: M8-2, 7/18/2016 1:15:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/01/16	08/01/16 17:17	EMW	IC6	1	BZH0123

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-11	Client Sample Name:	M8-1, 7/18/2016 1:46:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
<b>Dichlorodifluoromethane</b>	<b>1.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.099</b>	<b>EPA-524.2</b>	ND		1
<b>1,1-Dichloroethane</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-11	Client Sample Name:	M8-1, 7/18/2016 1:46:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>8.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>0.66</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-11	Client Sample Name:	M8-1, 7/18/2016 1:46:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 04:56	JMS	MS-V14	1	BZG1763

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Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

BCL Sample ID:	1619851-11	Client Sample Name: M8-1, 7/18/2016 1:46:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	08/01/16	08/01/16 17:59	EMW	IC6	1		BZH0124

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-12	Client Sample Name:	QCAB, 7/18/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-12	Client Sample Name:	QCAB, 7/18/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-12	Client Sample Name:	QCAB, 7/18/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 05:19	JMS	MS-V14	1	BZG1763

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-13	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-13	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619851-13	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/22/16 05:42	JMS	MS-V14	1	BZG1763

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1763</b>						
Benzene	BZG1763-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1763-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1763-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1763-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1763-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1763-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1763-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1763-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1763-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1763-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1763-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1763-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1763-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1763-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1763-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1763-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1763-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1763-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1763-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1763-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1763-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1763-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1763-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1763</b>						
trans-1,3-Dichloropropene	BZG1763-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1763-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1763-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1763-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1763-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1763-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1763-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1763-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1763-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1763-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1763-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1763-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1763-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1763-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1763-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1763-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1763-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1763-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1763-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1763-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1763-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1763-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1763-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1763-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1763-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1763-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1763</b>						
2-Hexanone	BZG1763-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1763-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1763-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1763-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1763-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1763-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1763-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1763-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1763-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1763-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1763-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1763-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1763-BLK1	102	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1763-BLK1	94.9	%	80 - 120 (LCL - UCL)		
<b>QC Batch ID: BZG1764</b>						
Benzene	BZG1764-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1764-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1764-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1764-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1764-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1764-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1764-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1764-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1764-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1764-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1764-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1764-BLK1	ND	ug/L	1.0	0.44	

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1764</b>						
1,2-Dibromoethane	BZG1764-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1764-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1764-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1764-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1764-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1764-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1764-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1764-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1764-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1764-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1764-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BZG1764-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1764-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1764-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1764-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1764-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1764-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1764-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1764-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1764-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1764-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1764-BLK1	ND	ug/L	0.50	0.16	

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1764</b>						
Trichloroethene	BZG1764-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1764-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1764-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1764-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1764-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1764-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1764-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1764-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1764-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1764-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1764-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1764-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1764-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1764-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1764-BLK1	ND	ug/L	0.50	0.18	
2-Hexanone	BZG1764-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1764-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1764-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1764-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1764-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1764-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1764-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1764-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1764-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1764-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1764-BLK1	ND	ug/L	0.50	0.082	
<b>1,2-Dichloroethane-d4 (Surrogate)</b>	<b>BZG1764-BLK1</b>	<b>100</b>	%	<b>75 - 125 (LCL - UCL)</b>		
<b>Toluene-d8 (Surrogate)</b>	<b>BZG1764-BLK1</b>	<b>102</b>	%	<b>80 - 120 (LCL - UCL)</b>		
<b>4-Bromofluorobenzene (Surrogate)</b>	<b>BZG1764-BLK1</b>	<b>95.8</b>	%	<b>80 - 120 (LCL - UCL)</b>		

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1763</b>									
Benzene	BZG1763-BS1	LCS	22.764	25.000	ug/L	91.1	70 - 130		
Bromodichloromethane	BZG1763-BS1	LCS	20.797	25.000	ug/L	83.2	70 - 130		
Chlorobenzene	BZG1763-BS1	LCS	22.331	25.000	ug/L	89.3	70 - 130		
Chloroethane	BZG1763-BS1	LCS	22.883	25.000	ug/L	91.5	70 - 130		
1,4-Dichlorobenzene	BZG1763-BS1	LCS	21.856	25.000	ug/L	87.4	70 - 130		
1,1-Dichloroethane	BZG1763-BS1	LCS	23.024	25.000	ug/L	92.1	70 - 130		
1,1-Dichloroethene	BZG1763-BS1	LCS	22.817	25.000	ug/L	91.3	70 - 130		
Toluene	BZG1763-BS1	LCS	22.275	25.000	ug/L	89.1	70 - 130		
Trichloroethene	BZG1763-BS1	LCS	22.868	25.000	ug/L	91.5	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG1763-BS1	LCS	9.7400	10.000	ug/L	97.4	75 - 125		
Toluene-d8 (Surrogate)	BZG1763-BS1	LCS	10.140	10.000	ug/L	101	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG1763-BS1	LCS	9.6500	10.000	ug/L	96.5	80 - 120		
<b>QC Batch ID: BZG1764</b>									
Benzene	BZG1764-BS1	LCS	30.284	25.000	ug/L	121	70 - 130		
Bromodichloromethane	BZG1764-BS1	LCS	26.555	25.000	ug/L	106	70 - 130		
Chlorobenzene	BZG1764-BS1	LCS	29.288	25.000	ug/L	117	70 - 130		
Chloroethane	BZG1764-BS1	LCS	30.532	25.000	ug/L	122	70 - 130		
1,4-Dichlorobenzene	BZG1764-BS1	LCS	28.054	25.000	ug/L	112	70 - 130		
1,1-Dichloroethane	BZG1764-BS1	LCS	30.190	25.000	ug/L	121	70 - 130		
1,1-Dichloroethene	BZG1764-BS1	LCS	30.249	25.000	ug/L	121	70 - 130		
Toluene	BZG1764-BS1	LCS	28.593	25.000	ug/L	114	70 - 130		
Trichloroethene	BZG1764-BS1	LCS	30.018	25.000	ug/L	120	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG1764-BS1	LCS	10.270	10.000	ug/L	103	75 - 125		
Toluene-d8 (Surrogate)	BZG1764-BS1	LCS	10.060	10.000	ug/L	101	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG1764-BS1	LCS	9.3900	10.000	ug/L	93.9	80 - 120		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/04/2016 17:19

Project: Rialto Perchlorate Investigator

Project Number: 2013-0100

Project Manager: Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1763</b>		Used client sample: N									
Benzene	MS	1619983-05	ND	24.608	25.000	ug/L		98.4		70 - 130	
	MSD	1619983-05	ND	27.293	25.000	ug/L	10.3	109	20	70 - 130	
Bromodichloromethane	MS	1619983-05	ND	21.875	25.000	ug/L		87.5		70 - 130	
	MSD	1619983-05	ND	24.147	25.000	ug/L	9.9	96.6	20	70 - 130	
Chlorobenzene	MS	1619983-05	ND	22.804	25.000	ug/L		91.2		70 - 130	
	MSD	1619983-05	ND	26.990	25.000	ug/L	16.8	108	20	70 - 130	
Chloroethane	MS	1619983-05	ND	24.564	25.000	ug/L		98.3		70 - 130	
	MSD	1619983-05	ND	27.269	25.000	ug/L	10.4	109	20	70 - 130	
1,4-Dichlorobenzene	MS	1619983-05	ND	22.142	25.000	ug/L		88.6		70 - 130	
	MSD	1619983-05	ND	26.106	25.000	ug/L	16.4	104	20	70 - 130	
1,1-Dichloroethane	MS	1619983-05	ND	24.802	25.000	ug/L		99.2		70 - 130	
	MSD	1619983-05	ND	27.396	25.000	ug/L	9.9	110	20	70 - 130	
1,1-Dichloroethene	MS	1619983-05	ND	24.375	25.000	ug/L		97.5		70 - 130	
	MSD	1619983-05	ND	27.292	25.000	ug/L	11.3	109	20	70 - 130	
Toluene	MS	1619983-05	ND	23.457	25.000	ug/L		93.8		70 - 130	
	MSD	1619983-05	ND	25.803	25.000	ug/L	9.5	103	20	70 - 130	
Trichloroethene	MS	1619983-05	ND	23.759	25.000	ug/L		95.0		70 - 130	
	MSD	1619983-05	ND	25.878	25.000	ug/L	8.5	104	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1619983-05	ND	10.110	10.000	ug/L		101		75 - 125	
	MSD	1619983-05	ND	9.9400	10.000	ug/L	1.7	99.4		75 - 125	
Toluene-d8 (Surrogate)	MS	1619983-05	ND	10.070	10.000	ug/L		101		80 - 120	
	MSD	1619983-05	ND	9.9900	10.000	ug/L	0.8	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1619983-05	ND	9.5500	10.000	ug/L		95.5		80 - 120	
	MSD	1619983-05	ND	9.6700	10.000	ug/L	1.2	96.7		80 - 120	
<b>QC Batch ID: BZG1764</b>		Used client sample: Y - Description: M7-7, 07/18/2016 07:47									
Benzene	MS	1619851-01	ND	23.720	25.000	ug/L		94.9		70 - 130	
	MSD	1619851-01	ND	23.745	25.000	ug/L	0.1	95.0	20	70 - 130	
Bromodichloromethane	MS	1619851-01	ND	21.509	25.000	ug/L		86.0		70 - 130	
	MSD	1619851-01	ND	21.563	25.000	ug/L	0.3	86.3	20	70 - 130	
Chlorobenzene	MS	1619851-01	ND	22.922	25.000	ug/L		91.7		70 - 130	
	MSD	1619851-01	ND	22.772	25.000	ug/L	0.7	91.1	20	70 - 130	
Chloroethane	MS	1619851-01	ND	23.529	25.000	ug/L		94.1		70 - 130	
	MSD	1619851-01	ND	23.931	25.000	ug/L	1.7	95.7	20	70 - 130	
1,4-Dichlorobenzene	MS	1619851-01	ND	22.083	25.000	ug/L		88.3		70 - 130	
	MSD	1619851-01	ND	22.211	25.000	ug/L	0.6	88.8	20	70 - 130	
1,1-Dichloroethane	MS	1619851-01	ND	23.996	25.000	ug/L		96.0		70 - 130	
	MSD	1619851-01	ND	23.833	25.000	ug/L	0.7	95.3	20	70 - 130	

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BZG1764</b>		Used client sample: Y - Description: M7-7, 07/18/2016 07:47								
1,1-Dichloroethene	MS	1619851-01	ND	23.667	25.000	ug/L		94.7		70 - 130
	MSD	1619851-01	ND	23.833	25.000	ug/L	0.7	95.3	20	70 - 130
Toluene	MS	1619851-01	0.11900	22.957	25.000	ug/L		91.4		70 - 130
	MSD	1619851-01	0.11900	23.057	25.000	ug/L	0.4	91.8	20	70 - 130
Trichloroethene	MS	1619851-01	ND	23.235	25.000	ug/L		92.9		70 - 130
	MSD	1619851-01	ND	23.221	25.000	ug/L	0.1	92.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1619851-01	ND	9.5100	10.000	ug/L		95.1		75 - 125
	MSD	1619851-01	ND	9.8900	10.000	ug/L	3.9	98.9		75 - 125
Toluene-d8 (Surrogate)	MS	1619851-01	ND	10.090	10.000	ug/L		101		80 - 120
	MSD	1619851-01	ND	10.090	10.000	ug/L	0	101		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1619851-01	ND	9.5900	10.000	ug/L		95.9		80 - 120
	MSD	1619851-01	ND	9.7000	10.000	ug/L	1.1	97.0		80 - 120

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZH0123</b>						
Perchlorate	BZH0123-BLK1	ND	ug/L	4.0	0.72	
<b>QC Batch ID: BZH0124</b>						
Perchlorate	BZH0124-BLK1	ND	ug/L	4.0	0.72	

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2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/04/2016 17:19  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits			Lab Quals
							RPD	Percent Recovery	RPD	
QC Batch ID: BZH0123										
Perchlorate	BZH0123-BS1	LCS	11.075	10.000	ug/L	111		85 - 115		
QC Batch ID: BZH0124										
Perchlorate	BZH0124-BS1	LCS	10.859	10.000	ug/L	109		85 - 115		

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**Reported:** 08/04/2016 17:19  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Ralph Murphy

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZH0123</b>		Used client sample: Y - Description: M7-7, 07/18/2016 07:47									
Perchlorate	DUP	1619851-01	ND	ND		ug/L			15		
	MS	1619851-01	ND	11.237	10.101	ug/L		111		80 - 120	
	MSD	1619851-01	ND	11.235	10.101	ug/L	0.0	111	15	80 - 120	
<b>QC Batch ID: BZH0124</b>		Used client sample: Y - Description: M8-1, 07/18/2016 13:46									
Perchlorate	DUP	1619851-11	ND	ND		ug/L			15		
	MS	1619851-11	ND	11.356	10.101	ug/L		112		80 - 120	
	MSD	1619851-11	ND	11.414	10.101	ug/L	0.5	113	15	80 - 120	

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/04/2016 17:19

Project: Rialto Perchlorate Investigatlon

Project Number: 2013-0100

Project Manager: Ralph Murphy

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.



Date of Report: 08/05/2016

Jason Sapp

Geologic Associates - Ontario

2777 E. Guasti Road  
Ontario, CA 91761

Client Project: 2013-0100

BCL Project: Rialto Perchlorate Investigation

BCL Work Order: 1619979

Invoice ID: B242477

Enclosed are the results of analyses for samples received by the laboratory on 7/20/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green  
Client Services Manager

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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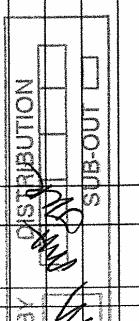
### Notes

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## Chain of Custody Form

Report To:	Client: Geologic Resource	Project #:	2013 - 0100
Attn:	Ralph Murphy	Project Name:	Hic Lite
Street Address:	277 E. Grand Rd.	Percilurka	
City, State, Zip:	Ontario, Ca 91761	Sampler(s):	B. Seilmes
Phone:	626-7282909	M. Campbell	
Email Address:	160116@79		
Work Order #:	Sample #	Description	Date Sampled
-1	F6A-4	10:05	7/19/16
-2	N3-4	15:18	
-3	QCA B		
-4	QC TB		

Comments:																											
Sample Matrix	Are there any tests with holding times less than or equal to 48 hours?																										
		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No																								
Ground Water	# of work days																										
		Turnaround = 10 work days																									
Drinking Water	# of work days																										
		Turnaround = 10 work days																									
Soil	# of work days																										
		Turnaround = 10 work days																									
Sludge	# of work days																										
		Turnaround = 10 work days																									
Waste Water	# of work days																										
		Turnaround = 10 work days																									
Other	# of work days																										
		Turnaround = 10 work days																									
<p align="center"><b>Notes</b></p> 																											
<p align="right"><b>System #</b> (Needed for EDT)</p> <table border="1"> <tr> <td>Time</td> <td>1. Received By</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>700</td> <td><i>Jay West</i></td> <td>12/16/15</td> <td>Time</td> </tr> <tr> <td>Timing</td> <td>2. Received By</td> <td>Date</td> <td>Time</td> </tr> <tr> <td><i>Jay</i></td> <td><i>Jay</i></td> <td>12/16/15</td> <td>Time</td> </tr> <tr> <td>Timing</td> <td>3. Received By</td> <td>Date</td> <td>Time</td> </tr> <tr> <td><i>Jay</i></td> <td><i>Jay</i></td> <td>12/16/15</td> <td>Time</td> </tr> </table>				Time	1. Received By	Date	Time	700	<i>Jay West</i>	12/16/15	Time	Timing	2. Received By	Date	Time	<i>Jay</i>	<i>Jay</i>	12/16/15	Time	Timing	3. Received By	Date	Time	<i>Jay</i>	<i>Jay</i>	12/16/15	Time
Time	1. Received By	Date	Time																								
700	<i>Jay West</i>	12/16/15	Time																								
Timing	2. Received By	Date	Time																								
<i>Jay</i>	<i>Jay</i>	12/16/15	Time																								
Timing	3. Received By	Date	Time																								
<i>Jay</i>	<i>Jay</i>	12/16/15	Time																								

<b>Billing</b>		Global ID (Needed for EDF)	
Client:	<input checked="" type="checkbox"/> Same as above	1. Relinquished By <i>Mark L. G.</i>	2. Relinquished By <i>J. C. G.</i>
Address:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes
City:	State _____ Zip _____	Send Copy to State of CA* (EDT)	
Attn:	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No
PO#:			

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## Chain of Custody and Cooler Receipt Form for 1619979 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM					Page _____ Of _____			
Submission #: 1619979										
SHIPPING INFORMATION						SHIPPING CONTAINER		FREE LIQUID		
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/>	Box <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>		
BC Lab Field Service <input checked="" type="checkbox"/>				Other <input type="checkbox"/> (Specify) _____		Other <input type="checkbox"/> (Specify) _____		W / S		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>						Comments: _____				
Custody Seals		Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/>		Comments: _____				
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
<input checked="" type="checkbox"/> COC Received <input type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.97		Container: PE Thermometer ID: 208		Date/Time 7-20-16 1938				
		Temperature: (A) 0.8 °C / (C) 0.9 °C				Analyst Init M				
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		D								
4oz / 8oz / 16oz PE UNPRES		D								
2oz Cr <sup>6+</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: \_\_\_\_\_

Sample Numbering Completed By: \_\_\_\_\_

A = Actual / C = Corrected

Date/Time: 7-20-16 2020

Rev 21 05/23/2016

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1619979-01	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> F6A-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/20/2016 19:45 <b>Sampling Date:</b> 07/19/2016 10:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619979-02	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> N3-4 <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/20/2016 19:45 <b>Sampling Date:</b> 07/19/2016 15:18 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Groundwater		
1619979-03	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCAB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/20/2016 19:45 <b>Sampling Date:</b> 07/19/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water		
1619979-04	<b>COC Number:</b> --- <b>Project Number:</b> --- <b>Sampling Location:</b> --- <b>Sampling Point:</b> QCTB <b>Sampled By:</b> ---	<b>Receive Date:</b> 07/20/2016 19:45 <b>Sampling Date:</b> 07/19/2016 00:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Blank Water		

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-01	Client Sample Name: F6A-4, 7/19/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
<b>1,1-Dichloroethane</b>	<b>0.31</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
<b>1,2-Dichloropropane</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-01	Client Sample Name: F6A-4, 7/19/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
<b>Methyl t-butyl ether</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>4.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
<b>Acetone</b>	<b>7.8</b>	<b>ug/L</b>	<b>10</b>	<b>4.6</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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2777 E. Guasti Road  
Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-01	Client Sample Name: F6A-4, 7/19/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/21/16 13:01	JMS	MS-V14	1	BZG1582

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Geologic Associates - Ontario  
2777 E. Guasti Road  
Ontario, CA 91761

Reported: 08/05/2016 17:48  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619979-01	Client Sample Name: F6A-4, 7/19/2016 10:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.0	ug/L	4.0	0.72	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/03/16	08/03/16 14:32	EMW	IC6	1	BZH0422

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Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-02	Client Sample Name:	N3-4, 7/19/2016 3:18:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
<b>Bromodichloromethane</b>	<b>0.38</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
<b>Chloroform</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Ontario, CA 91761

**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-02	Client Sample Name: N3-4, 7/19/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>2.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
<b>Trichloroethene</b>	<b>4.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND		1
<b>Trichlorofluoromethane</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-02	Client Sample Name:	N3-4, 7/19/2016 3:18:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/21/16 13:24	JMS	MS-V14	1	BZG1582

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Reported: 08/05/2016 17:48  
Project: Rialto Perchlorate Investigatlon  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Water Analysis (General Chemistry)

BCL Sample ID:	1619979-02	Client Sample Name: N3-4, 7/19/2016 3:18:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	11	ug/L	4.0	0.72	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	08/03/16	08/03/16 14:46	EMW	IC6	1	BZH0422

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-03	Client Sample Name:	QCAB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-03	Client Sample Name:	QCAB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-03	Client Sample Name: QCAB, 7/19/2016 12:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/21/16 13:47	JMS	MS-V14	1	BZG1582

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-04	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-04	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1619979-04	Client Sample Name:	QCTB, 7/19/2016 12:00:00AM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	07/21/16	07/21/16 14:11	JMS	MS-V14	1	BZG1582

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1582</b>						
Benzene	BZG1582-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BZG1582-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BZG1582-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BZG1582-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BZG1582-BLK1	ND	ug/L	0.50	0.25	
n-Butylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BZG1582-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BZG1582-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BZG1582-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BZG1582-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BZG1582-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BZG1582-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BZG1582-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BZG1582-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BZG1582-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BZG1582-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BZG1582-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BZG1582-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BZG1582-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BZG1582-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BZG1582-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BZG1582-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BZG1582-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BZG1582-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1582</b>						
trans-1,3-Dichloropropene	BZG1582-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BZG1582-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BZG1582-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BZG1582-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BZG1582-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BZG1582-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.11	
Styrene	BZG1582-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BZG1582-BLK1	ND	ug/L	0.50	0.13	
Toluene	BZG1582-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BZG1582-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BZG1582-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BZG1582-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BZG1582-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BZG1582-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BZG1582-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BZG1582-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BZG1582-BLK1	ND	ug/L	0.50	0.12	
Acetone	BZG1582-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BZG1582-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BZG1582-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BZG1582-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BZG1582-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BZG1582-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BZG1582-BLK1	ND	ug/L	5.0	1.4	
Ethyl methacrylate	BZG1582-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BZG1582-BLK1	ND	ug/L	0.50	0.18	

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BZG1582</b>						
2-Hexanone	BZG1582-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BZG1582-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BZG1582-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BZG1582-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BZG1582-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BZG1582-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BZG1582-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BZG1582-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BZG1582-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BZG1582-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BZG1582-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BZG1582-BLK1	94.1	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BZG1582-BLK1	99.6	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BZG1582-BLK1	95.6	%	80 - 120 (LCL - UCL)		

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BZG1582</b>									
Benzene	BZG1582-BS1	LCS	24.750	25.000	ug/L	99.0	70 - 130		
Bromodichloromethane	BZG1582-BS1	LCS	22.100	25.000	ug/L	88.4	70 - 130		
Chlorobenzene	BZG1582-BS1	LCS	24.112	25.000	ug/L	96.4	70 - 130		
Chloroethane	BZG1582-BS1	LCS	24.251	25.000	ug/L	97.0	70 - 130		
1,4-Dichlorobenzene	BZG1582-BS1	LCS	23.347	25.000	ug/L	93.4	70 - 130		
1,1-Dichloroethane	BZG1582-BS1	LCS	25.066	25.000	ug/L	100	70 - 130		
1,1-Dichloroethene	BZG1582-BS1	LCS	24.688	25.000	ug/L	98.8	70 - 130		
Toluene	BZG1582-BS1	LCS	23.883	25.000	ug/L	95.5	70 - 130		
Trichloroethene	BZG1582-BS1	LCS	25.240	25.000	ug/L	101	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZG1582-BS1	LCS	9.6400	10.000	ug/L	96.4	75 - 125		
Toluene-d8 (Surrogate)	BZG1582-BS1	LCS	10.010	10.000	ug/L	100	80 - 120		
4-Bromofluorobenzene (Surrogate)	BZG1582-BS1	LCS	9.7700	10.000	ug/L	97.7	80 - 120		

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Reported: 08/05/2016 17:48  
Project: Rialto Perchlorate Investigator  
Project Number: 2013-0100  
Project Manager: Jason Sapp

## Volatile Organic Analysis (EPA Method 524.2)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZG1582</b>		Used client sample: N									
Benzene	MS	1619726-01	ND	24.032	25.000	ug/L		96.1		70 - 130	
	MSD	1619726-01	ND	24.182	25.000	ug/L	0.6	96.7	20	70 - 130	
Bromodichloromethane	MS	1619726-01	ND	21.739	25.000	ug/L		87.0		70 - 130	
	MSD	1619726-01	ND	21.890	25.000	ug/L	0.7	87.6	20	70 - 130	
Chlorobenzene	MS	1619726-01	ND	23.077	25.000	ug/L		92.3		70 - 130	
	MSD	1619726-01	ND	22.900	25.000	ug/L	0.8	91.6	20	70 - 130	
Chloroethane	MS	1619726-01	ND	24.024	25.000	ug/L		96.1		70 - 130	
	MSD	1619726-01	ND	24.194	25.000	ug/L	0.7	96.8	20	70 - 130	
1,4-Dichlorobenzene	MS	1619726-01	ND	22.155	25.000	ug/L		88.6		70 - 130	
	MSD	1619726-01	ND	22.055	25.000	ug/L	0.5	88.2	20	70 - 130	
1,1-Dichloroethane	MS	1619726-01	ND	24.634	25.000	ug/L		98.5		70 - 130	
	MSD	1619726-01	ND	24.448	25.000	ug/L	0.8	97.8	20	70 - 130	
1,1-Dichloroethene	MS	1619726-01	ND	24.288	25.000	ug/L		97.2		70 - 130	
	MSD	1619726-01	ND	24.374	25.000	ug/L	0.4	97.5	20	70 - 130	
Toluene	MS	1619726-01	ND	23.480	25.000	ug/L		93.9		70 - 130	
	MSD	1619726-01	ND	23.186	25.000	ug/L	1.3	92.7	20	70 - 130	
Trichloroethene	MS	1619726-01	ND	23.513	25.000	ug/L		94.1		70 - 130	
	MSD	1619726-01	ND	23.482	25.000	ug/L	0.1	93.9	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1619726-01	ND	9.7200	10.000	ug/L		97.2		75 - 125	
	MSD	1619726-01	ND	9.9300	10.000	ug/L	2.1	99.3		75 - 125	
Toluene-d8 (Surrogate)	MS	1619726-01	ND	10.120	10.000	ug/L		101		80 - 120	
	MSD	1619726-01	ND	10.160	10.000	ug/L	0.4	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1619726-01	ND	9.5600	10.000	ug/L		95.6		80 - 120	
	MSD	1619726-01	ND	9.6300	10.000	ug/L	0.7	96.3		80 - 120	

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**Reported:** 08/05/2016 17:48  
**Project:** Rialto Perchlorate Investigatlon  
**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Perchlorate	QC Batch ID: BZH0422 BZH0422-BLK1	ND	ug/L	4.0	0.72	



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**Project Number:** 2013-0100  
**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BZH0422-BS1	LCS	10.357	10.000	ug/L	104			85 - 115
<b>QC Batch ID: BZH0422</b>									



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**Project Manager:** Jason Sapp

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BZH0422</b>		Used client sample: N									
Perchlorate	DUP	1620136-01	3.3084	3.4092		ug/L	3.0		15		J
	MS	1620136-01	3.3084	15.099	10.101	ug/L		117		80 - 120	
	MSD	1620136-01	3.3084	15.119	10.101	ug/L	0.1	117	15	80 - 120	



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**Project Manager:** Jason Sapp

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

**Appendix B**  
**Field Logs**

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# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808 -TR 1	Site: AECOM RIALTO
Sampler: TR	Water Quality Meter: 556
Sampling Method: Hydrasleeve	

Well I.D.: IN/SW-34D2S	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD):	Depth to Water (DTW): 498.59			of Hydrasleeve:			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/12	0830	19.4	8.72	305	2	6.74	107.5
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations:							

Well I.D.: IN/SW-34D3S	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD):	Depth to Water (DTW): 498.61			of Hydrasleeve:			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/12	0840	18.4	7.75	303	14	4.14	72.7
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations:							

Well I.D.: EPA-MW-9A	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD): 548.60 ✓	Depth to Water (DTW): 479.08			of Hydrasleeve:			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	1005	21.3	8.73	418	38	5.37	-11.2
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations: DVP COLLECTED @ 1010							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808 - HHI	Site: AECOM RIALTO
Sampler: TR	Water Quality Meter: 556
Sampling Method: Hydrasleeve	

Well I.D.: EMN - 01B	Well Diameter: 2 (3) 4 6 8 —						
Total Well Depth (TD): —	Depth to Water (DTW): 421.50			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0810	21.3	8.03	390	144	1.95	116.5
QA/QC (Sample ID): —			Analyzed for: COC			Laboratory: TA	
Observations: MS/MSD Collected —							

Well I.D.: EMN - 01A	Well Diameter: 2 (3) 4 6 8 —						
Total Well Depth (TD): —	Depth to Water (DTW): 421.50			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0830	20.7	8.95	247	48	0.82	-56.5
QA/QC (Sample ID): —			Analyzed for: see COC			Laboratory: TA	
Observations: DVP connected @ 0835							

Well I.D.: RIALTO - 2	Well Diameter: 2 3 4 6 8 (24")						
Total Well Depth (TD):	Depth to Water (DTW): 482.10			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	1100	22.9	8.25	462	3	5.86	52.7
QA/QC (Sample ID): —			Analyzed for: See COC			Laboratory: TA	
Observations:							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808-HH1	Site: AECOM RIAUTO
Sampler: TR	Water Quality Meter: 556
Sampling Method: Hydrasleeve	

Well I.D.: EMN-04A	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 430.00			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	1245	20.6	7.91	463	612	5.92	51.4
QA/QC (Sample ID): —			Analyzed for: See COC			Laboratory: TA	
Observations:							

Well I.D.: EMN-04B	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 514.10			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	1230	20.6	9.68	317	>1000	0.90	-40.6
QA/QC (Sample ID): —			Analyzed for: See COC			Laboratory: TA	
Observations:							

Well I.D.: EMN-04C	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 514.00			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	1220	23.0	9.21	197	>1000	0.58	-136.7
QA/QC (Sample ID): —			Analyzed for: See COC			Laboratory: TA	
Observations:							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808 - HH	Site: AECOM RIALTO
Sampler: TR	Water Quality Meter: 556
Sampling Method: Hydrasleeve	

Well I.D.: EMN-6D			Well Diameter: 2 3 4 6 8				
Total Well _____ Depth (TD):			Depth to Water (DTW): 436.66			of Hydrasleeve: _____	
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0910	21.2	7.97	507	44	2.94	89.0
QA/QC (Sample ID):			Analyzed for: See COC			Laboratory: TA	
Observations: DVP collected @ 0915							

Well I.D.: EMN-6S			Well Diameter: 2 3 4 6 8				
Total Well _____ Depth (TD):			Depth to Water (DTW): 436.68			of Hydrasleeve: _____	
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0920	21.9	7.81	528	37	5.06	92.2
QA/QC (Sample ID):			Analyzed for: See COC			Laboratory: TA	
Observations:							

Well I.D.: PW-2			Well Diameter: 2 3 4 6 8				
Total Well _____ Depth (TD):			Depth to Water (DTW): 473.10			of Hydrasleeve: _____	
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0735	19.6	8.91	415	413	5.12	89.6
QA/QC (Sample ID):			Analyzed for: See COC			Laboratory: TA	
Observations:							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808-HA1	Site: AECOM RIALTO
Sampler: TR	Water Quality Meter: YSI 554
Sampling Method: Hydrasleeve	

Well I.D.: EMN-03C	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 527.24			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0910	22.2	9.11	250	88	1.53	91.3
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: T.A.			
Observations:							

Well I.D.: EMN-03B	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 527.35			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0925	23.5	10.02	267	>1000	0.66	-118.4
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: T.A.			
Observations: DNP collected @ 0930							

Well I.D.: EMN-03A	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 406.47			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0950	22.5	8.32	443	18	6.17	42.5
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: T.A.			
Observations:							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #:	Site:
Sampler:	Water Quality Meter:
Sampling Method:	Hydrasleeve

Well I.D.: EMW-05C	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD):	Depth to 0730 of Hydrasleeve: Water (DTW): 597.32						
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0810	21.3	10.84	511	28	4.11	77.9
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations:							

Well I.D.: EMW-05B	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD):	Depth to 0733 of Hydrasleeve: Water (DTW): 597.24						
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0825	21.5	9.31	528	15	1.21	27.5
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations:							

Well I.D.: EMW-05A	Well Diameter: 2 3 4 6 8						
Total Well Depth (TD):	Depth to 0800 of Hydrasleeve: Water (DTW): 439.41						
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/16	0835	19.8	8.37	446	5.8	5.69	32.8
QA/QC (Sample ID):			Analyzed for: see COC			Laboratory: TA	
Observations:							

# HYDRASLEEVE SAMPLING DATA SHEET

Project #: 160808-HH1	Site: AECOM RIALTO
Sampler: TR	Water Quality Meter: SS4
Sampling Method: Hydrasleeve	

Well I.D.: EPA-MW-9B	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 479.12			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0950	21.5	10.47	157	40	0.86	-220.7
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: TA			
Observations:							

Well I.D.: EMW-07D	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 430.96			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0725	21.1	8.11	614	20	2.91	170.7
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: TA			
Observations:							

Well I.D.: EMW-07S	Well Diameter: 2 (3) 4 6 8						
Total Well Depth (TD): —	Depth to Water (DTW): 430.98			of Hydrasleeve: —			
Date	Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)
8/15	0735	19.9	8.10	445	32	1.59	152.6
QA/QC (Sample ID): —	Analyzed for: see COC			Laboratory: TA			
Observations:							

# **Westbay™ Groundwater Monitoring Well Field Data Log Sheet**

Well: PW-5  
Date: 08/09/16  
Project: Rialto, CA

Probe Serial No.: EMS 4700  
Operator(s): T. Hoang Phil A  
Weather *dry*

$^{\circ}\text{C}$	degrees Celsius
btoc	below top of casing
ft	feet
ID	identification
mS/cm	millisiemens per centimeter
mg/L	milligrams per liter
mV	millivolts
NTU	nephelometric turbidity units

DUP  
PW-5D-6W-090816-D @ 1110

# **Westbay™ Groundwater Monitoring Well Field Data Log Sheet**

Well: PW-6  
Date: 08/08/16 + 08/09/16  
Project: Rialto, CA

Probe Serial No.: EMS 4700  
Operator(s): T. Hoare  
Weather clear

$^{\circ}\text{C}$	degrees Celsius
btoc	below top of casing
ft	feet
ID	identification
mS/cm	millisiemens per centimeter
mg/L	milligrams per liter
mV	millivolts
NTU	nephelometric turbidity units

~~EB-LW-08082016 @ 1500~~  
EB-LW-080816 @ 1500  
TB-LW-090816 @ 0700

**Westbay™ Groundwater Monitoring Well**  
**Field Data Log Sheet**

Well: PW-7  
 Date: 08/08/16  
 Project: Rialto, CA

Probe Serial No.: EMS 4700  
 Operator(s): T. Hoang Ph. IIA  
 Weather Clear

Port	Depth to Port (Log) (ft btoc)	Depth to Port (Field) (ft btoc)	Time	Temp (°C)	pH	Cond (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Sample ID
G	817	816	0915	25.0	8.21	0.809	6.98	1	224	PW-7G-GW-080816
F	752	751	1000	22.6	7.94	0.417	7.28	2	217	PW-7F-GW-080816
E	688	686	1030	24.3	7.72	0.438	6.39	2	197	PW-7E-GW-080816
D	638	636	1115	24.0	7.61	0.487	7.04	1	209	PW-7D-GW-080816
C	568	566	1130	24.3	7.52	0.492	6.17	1	200	PW-7C-GW-080816
B	498	497	1155	24.6	7.56	0.453	6.02	2	217	PW-7B-GW-080816
A	432	432	—	Port is Dry - No Sample Taken	—	—	—	—	—	PW-7A-GW-#

°C degrees Celsius  
 btoc below top of casing  
 ft feet  
 ID identification  
 mS/cm millisiemens per centimeter  
 mg/L milligrams per liter  
 mV millivolts  
 NTU nephelometric turbidity units

PUP  
 08/08/16  
 08082016-D @ PW-7C-GW-08/08/2016  
 PW-7C-08/08/2016-D @ 1140 PW-7C-GW-080816-D 1140

FB-08082016-TB-1@0700

TB-LW-08082016@0700

TB-LW-080816@0700

# **Westbay™ Groundwater Monitoring Well Field Data Log Sheet**

Well: PW-8  
Date: 08/10/16  
Project: Rialto, CA

Probe Serial No.: EMS 4700  
Operator(s): T. Haug Phil A.  
Weather Clear

°C	degrees Celsius
btoc	below top of casing
ft	feet
ID	identification
mS/cm	millisiemens per centimeter
mg/L	milligrams per liter
mV	millivolts
NTU	nephelometric turbidity units

TB-LW-100816 @0700  
EB-LW-100816 @1100

## **Westbay™ Groundwater Monitoring Well Water Level Measurement Log Sheet**

Well: PW-5  
Date: 08/09/16  
Project: Rialto, CA

Probe Serial No.: EMS 9700  
Operator(s): T. Hung Phil A.  
Weather Clear

Static DTW - 438.53'

<b>btoc</b>	below top of casing
<b>D<sub>inside</sub></b>	depth to water - inside casing
<b>D<sub>port</sub></b>	depth to port – from cable
<b>DTW</b>	depth to water
<b>ft</b>	feet
<b>P<sub>atm</sub></b>	pressure - atmosphere (psia)
<b>P<sub>inside</sub></b>	pressure - inside casing
<b>P<sub>outside</sub></b>	pressure - outside casing
<b>psia</b>	pounds per square inch, atmosphere

**Calculation 1 (preferred):**  
 $DTW = (P_{\text{inside}} - P_{\text{outside}}) * 2.307 \text{ (ft/psia)} + D_{\text{inside}}$

**Calculation 2 (used for sanity check):**  
 $DTW = [(P_{\text{outside}} - P_{\text{atm}}) * 2.307 \text{ (ft/psia)} - D_{\text{port}}]$

# **Westbay™ Groundwater Monitoring Well**

## **Water Level Measurement Log Sheet**

**Well:** PW-6  
**Date:** 08/08/16  
**Project:** Rialto CA

Probe Serial No.: EMS 4700  
Operator(s): T. Hoag Phil A.  
Weather Clear

static DTW-421.SI'

btoc	below top of casing
D <sub>inside</sub>	depth to water - inside casing
D <sub>port</sub>	depth to port – from cable
DTW	depth to water
ft	feet
P <sub>atm</sub>	pressure - atmosphere (psia)
P <sub>inside</sub>	pressure - inside casing
P <sub>outside</sub>	pressure - outside casing
psia	pounds per square inch, atmospheric

**Calculation 1 (preferred):**  

$$DTW = (P_{\text{inside}} - P_{\text{outside}}) * 2.307 \text{ (ft/psia)} + D_{\text{inside}}$$

**Calculation 2 (used for sanity check):**  
 $DTW = [(P_{\text{outside}} - P_{\text{atm}}) * 2.307 \text{ (ft/psia)}] - D_{\text{port}}$

# **Westbay™ Groundwater Monitoring Well**

## **Water Level Measurement Log Sheet**

Well: PW-7  
Date: 08/08/16  
Project: Rialto, CA

Probe Serial No.: EIMS 4700  
Operator(s): T. Hoang Phil A  
Weather: Cleary

Static DTW - 399.75'

Port	Depth to Port (Log) (ft btoc)	Depth to Port (Field) (ft btoc)	Time	Atmosph. Pressure (psia)	Pressure Inside Casing (psia)	Pressure Outside Casing (psia)	DTW Inside Casing (ft btoc)	Calc 1 DTW (ft btoc)	Calc 2 DTW (ft btoc)	Diff (ft)
	--	D <sub>port</sub>			P <sub>inside</sub>	P <sub>outside</sub>	D <sub>inside</sub>			
G	817	816	0834	14.10	198.75	177.74	392.17			
F	752	751	0841	14.10	170.47	149.66	392.62			
E	688	686	0845	14.10	142.16	121.54	393.00			
D	638	636	0847	14.10	120.44	99.91	393.35			
C	568	567	0849	14.10	89.91	69.62	393.82			
B	498	496	0851	14.10	59.42	39.34	394.22			
A	432	432	0854	14.10	31.14	14.35	394.66			
A	432	432	1217	14.10	30.79	14.35	395.38			

<b>btoc</b>	below top of casing
<b>D<sub>inside</sub></b>	depth to water - inside casing
<b>D<sub>port</sub></b>	depth to port – from cable
<b>DTW</b>	depth to water
<b>ft</b>	feet
<b>P<sub>atm</sub></b>	pressure - atmosphere (psia)
<b>P<sub>inside</sub></b>	pressure - inside casing
<b>P<sub>outside</sub></b>	pressure - outside casing
<b>psia</b>	pounds per square inch, atmosphere

**Calculation 1 (preferred):**  
 $DTW = (P_{inside} - P_{outside}) * 2.307 \text{ (ft/psia)} + D_{inside}$

**Calculation 2 (used for sanity check):**  
 $DTW = [(P_{\text{outside}} - P_{\text{atm}}) * 2.307 \text{ (ft/psia)}] - D_{\text{port}}$

**Westbay™ Groundwater Monitoring Well**  
**Water Level Measurement Log Sheet**

Well: PW-8  
 Date: 08/10/16  
 Project: Rialto, CA  
*Static DTW - 491.82'*

Probe Serial No.: EMS4700  
 Operator(s): T. Hoang Phil A.  
 Weather Clear

Port	Depth to Port (Log) (ft btoc)	Depth to Port (Field) (ft btoc)	Time	Atmosph. Pressure (psia)	Pressure Inside Casing (psia)	Pressure Outside Casing (psia)	DTW Inside Casing (ft btoc)	Calc 1 DTW (ft btoc)	Calc 2 DTW (ft btoc)	Diff (ft)
	--	D <sub>port</sub>			P <sub>atm</sub>	P <sub>inside</sub>	P <sub>outside</sub>	D <sub>inside</sub>	--	--
E	772	771	0803	14.12	138.82	112.73	484.45			
D	722	721	0806	14.12	117.08	91.15	484.86			
C	647	646	0810	14.12	84.46	58.74	485.25			
B	547	546	0813	14.12	40.91	15.49	485.99			
A	442	441	0816	14.12	19.23	25.12	—			

btoc below top of casing  
 D<sub>inside</sub> depth to water - inside casing  
 D<sub>port</sub> depth to port - from cable  
 DTW depth to water  
 ft feet  
 P<sub>atm</sub> pressure - atmosphere (psia)  
 P<sub>inside</sub> pressure - inside casing  
 P<sub>outside</sub> pressure - outside casing  
 psia pounds per square inch, atmosphere

**Calculation 1 (preferred):**  

$$\text{DTW} = (P_{\text{inside}} - P_{\text{outside}}) * 2.307 \text{ (ft/psia)} + D_{\text{inside}}$$

**Calculation 2 (used for sanity check):**  

$$\text{DTW} = [(P_{\text{outside}} - P_{\text{atm}}) * 2.307 \text{ (ft/psia)} - D_{\text{port}}]$$

# **BLAINE**

TECH SERVICES, INC.

**1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555**

**CHAIN OF CUSTODY**

CLIENT

AECOM

### Rockets, Fireworks, and Flares

Rialto, CA

SAMPLING DATE TIME SAMPLING  
COMPLETED 38/10/16 115 PERFORMED BY

RELEASED BY 5/10/16 BY 11:59 PM

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**SHIPPED VIA**

#### **CONDUCT ANALYSIS TO DETECT**

Test America  
LAB - Accutest

**Billing Information:**

**Invoice and Report to:**

HollyHolbrook

**999 W. Town and Country Road  
Orange, CA 92868-4713  
[www.aecom.com](http://www.aecom.com)**

**ADD'L INFORMATION**

COC 1 of 1

|coc | of |

**BLAINE**

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

## CONDUCT ANALYSIS TO DETECT

LAB - Test America

COC 1 of 2

Billing Information:

Invoice and Report to:

Holly Holbrook

999 W. Town and Country Road

Orange, CA 92868-4713

[www.aecom.com](http://www.aecom.com)

## CHAIN OF CUSTODY

CLIENT

AECOM

SITE

Rockets, Fireworks, and Flares

Rialto, CA

CONTAINERS

SAMPLE I.D. DATE TIME MATRIX #

TB-LW-160816 08/16/16 0700 LW 3 Voss

PW-2-485-GW-160816 08/16/16 0735 GW 3 Voss  
1 PolyEB-LW-160816 08/16/16 0750 LW 3 Voss  
1 PolyEMW-5C-720-GW-160816 08/16/16 0810 GW 3 Voss  
1 PolyEMW-5C-720-GW-160816-MS/MSD 08/16/16 0810 GW 6 Voss  
2 PolyEMW-5B-615-GW-160816 08/16/16 0825 GW 3 Voss  
1 PolyEMW-5A-450-GW-160816 08/16/16 0835 GW 3 Voss  
1 PolyEMW-3L-640-GW-160816 08/16/16 0910 GW 3 Voss  
1 PolyEMW-3B-559-GW-160816 08/16/16 0925 GW 3 Voss  
1 PolyEMW-3B-559-GW-160816-D 08/16/16 0930 GW 3 Voss  
1 Poly

VOC's 8260B

Perchlorate 314.0

ADD'L INFORMATION

SAMPLING  
COMPLETED DATE TIME

08/16/16 0950

SAMPLING  
PERFORMED BY

TR/DR

RESULTS NEEDED  
NO LATER THAN

As Contracted

RELEASED BY

JR

TIME

8/16/16 1600

RECEIVED BY

JR

TIME

1600

RELEASED BY

JR

TIME

8/17/16 1540

RECEIVED BY

JR

TIME

8/17/16 1540

RELEASED BY

RECEIVED BY

SHIPPED VIA

TIME SENT

COOLER #

# BLAINE TECH SERVICES, INC.

**1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555**

#### **CONDUCT ANALYSIS TO DETECT**

LAB - Test America

COC 2 of 2

### Billing Information

**Invoice and Report to:**

HollyHolbrook

999 W. Town and Country Road  
Orange, CA 92868-4713  
[www.aecom.com](http://www.aecom.com)

---

**CHAIN OF CUSTODY**

CLIENT	AECOM
SITE	Rockets, Fireworks, and Flares
	Rialto, CA

८८

**BLAINE**

TECH SERVICES, INC.

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## CONDUCT ANALYSIS TO DETECT

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## CHAIN OF CUSTODY

## CLIENT

AECOM

## SITE

Rockets, Fireworks, and Flares

Rialto, CA

SAMPLE I.D.	DATE	TIME	MATRIX#	CONTAINERS	VOC's 8260B	Perchlorate 314.0	ADD'L INFORMATION		
EMW-65-477-GW-150816	08/15/16	0420		3 Vials 1 Poly	X	X			
EPA-MW9B-725-GW-150816	08/15/16	0450		3 Vials 1 Poly	X	X			
EPA-MW9A-530-GW-150816	08/15/16	1005		3 Vials 1 Poly	X	X			
EPA-MW9A-530-GW-150816-D	08/15/16	1010		3 Vials 1 Poly	X	X			
Rialto - 2 - 940-GW-150816	08/15/16	1100		3 Vials 1 Poly	X	X			
EMW-4L-690-GW-150816	08/15/16	1220		3 Vials 1 Poly	X	X			
EMW-4B-605-GW-150816	08/15/16	1230		3 Vials 1 Poly	X	X			
EMW-4A-450-GW-150816	08/15/16	1245		3 Vials 1 Poly	X	X			
SAMPLING COMPLETED	DATE 08/15/16	TIME 1245	SAMPLING PERFORMED BY	TR/DR	RESULTS NEEDED NO LATER THAN		As Contracted		

RELEASED BY	TIME 1545	RECEIVED BY	TIME 1626
RELEASED BY	TIME 1011	RECEIVED BY	TIME 8/16/16 1011
RELEASED BY	TIME	RECEIVED BY	TIME

SHIPPED VIA	TIME SENT	COOLER #	
-------------	-----------	----------	--

**BLAINE**

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

## CONDUCT ANALYSIS TO DETECT

LAB - Test America

COC 1 of 2

## Billing Information:

## Invoice and Report to:

Holly Holbrook

999 W. Town and Country Road  
Orange, CA 92868-4713  
[www.aecom.com](http://www.aecom.com)

## CHAIN OF CUSTODY

CLIENT

AECOM

SITE Rockets, Fireworks, and Flares

Rialto, CA

CONTAINERS

SAMPLE I.D. DATE TIME MATRIX# ADD'L INFORMATION

TB-LW-150816

08/15/16 0700

3 Vials

VOC's 8260B

Perchlorate 314.0

(DP)

EWM-7D-540-GW-150816

08/15/16 0725

3 Vials  
1 Poly

X

X

EWM-7S-470-GW-150816

08/15/16 0735

3 Vials  
1 Poly

X

X

EB-LW-150816

08/15/16 0745

3 Vials  
1 Poly

X

X

EMW-1A-470-GW-150816

08/15/16 0830

3 Vials  
1 Poly

X

X

EMW-1A-470-GW-150816-D

08/15/16 0835

3 Vials  
1 Poly

X

X

EMW-1B-556-GW-150816

08/15/16 0810

3 Vials  
1 Poly

X

X

EMW-1B-556-GW-150816-MS/MSD

08/15/16 0815

6 Vials  
2 Poly

X

X

MS/MSD

EMW-6D-584-GW-150816

08/15/16 0910

3 Vials  
1 Poly

X

X

EMW-6D-584-GW-150816-D

08/15/16 0915

3 Vials  
1 Poly

X

X

SAMPLING DATE TIME SAMPLING PERFORMED BY RESULTS NEEDED NO LATER THAN As Contracted  
COMPLETED 08/15/16 1245 TR/DR

RELEASED BY

*TR*

TIME

*1845*

RECEIVED BY

*John K*

TIME

*1626*

RELEASED BY

*John K*

TIME

*1011*

RECEIVED BY

*John K*

TIME

*8/16/16 1011*

RELEASED BY

TIME

RECEIVED BY

TIME

SHIPPED VIA

TIME SENT

COOLER #

**Appendix C**  
**Chain-of-Custody Forms and Laboratory Data**

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-155030-1

Client Project/Site: RFF Rialto Treatment, 60438759

For:

AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook



Authorized for release by:

8/30/2016 11:09:53 AM

Camille Murray, Project Manager I

[camille.murray@testamericainc.com](mailto:camille.murray@testamericainc.com)

Designee for

Patty Mata, Senior Project Manager

(949)261-1022

[patty.mata@testamericainc.com](mailto:patty.mata@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155030-1	TB-LW-090816	Water	08/09/16 07:00	08/09/16 19:00
440-155030-2	PW-6D-GW-090816	Water	08/09/16 07:45	08/09/16 19:00
440-155030-3	PW-6C-GW-090816	Water	08/09/16 08:10	08/09/16 19:00
440-155030-4	PW-6B-GW-090816	Water	08/09/16 08:35	08/09/16 19:00
440-155030-5	PW-5E-GW-090816	Water	08/09/16 10:30	08/09/16 19:00
440-155030-6	PW-5D-GW-090816	Water	08/09/16 11:00	08/09/16 19:00
440-155030-7	PW-5D-GW-090816-D	Water	08/09/16 11:10	08/09/16 19:00
440-155030-8	PW-5C-GW-090816	Water	08/09/16 11:35	08/09/16 19:00
440-155030-9	PW-5B-GW-090816	Water	08/09/16 12:15	08/09/16 19:00
440-155030-10	PW-5A-GW-090816	Water	08/09/16 12:45	08/09/16 19:00
440-155030-11	EB-LW-090816	Water	08/09/16 13:00	08/09/16 19:00

1

2

3

4

5

6

7

8

9

10

11

12

13

# Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Job ID: 440-155030-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-155030-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/9/2016 7:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 3.8° C, 4.1° C, 4.2° C, 4.3° C, 4.7° C and 4.9° C.

#### GC/MS VOA

Method(s) 8260B: The following volatile sample was analyzed with headspace in the sample vial due to multiple runs performed: TB-LW-090816 (440-155030-1). Headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260B: The method blank for batch 440-349130 contained Napthalene above the method detection limit (MDL). None of the samples associated with this method blank contained the target compound; therefore, re-analysis of samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### HPLC/IC

Method(s) 314.0 LL: Due to the high concentration of perchlorate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 440-351512 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: TB-LW-090816**

Date Collected: 08/09/16 07:00

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155030-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 14:21	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 14:21	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 14:21	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 14:21	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 14:21	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 14:21	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 14:21	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 14:21	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 14:21	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 14:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 14:21	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 14:21	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/14/16 14:21	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 14:21	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 14:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 14:21	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 14:21	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/14/16 14:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/14/16 14:21	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/14/16 14:21	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/14/16 14:21	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
o-Xylene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 14:21	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: TB-LW-090816**

**Lab Sample ID: 440-155030-1**

Date Collected: 08/09/16 07:00

Matrix: Water

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 14:21	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 14:21	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 14:21	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 14:21	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 14:21	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Trichloroethene	ND		1.0	0.25	ug/L			08/14/16 14:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 14:21	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 14:21	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:21	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 14:21	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 14:21	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		08/14/16 14:21	1
Dibromofluoromethane (Surr)	101		76 - 132		08/14/16 14:21	1
Toluene-d8 (Surr)	105		80 - 128		08/14/16 14:21	1

**Method: 8260B - Volatile Organic Compounds (GC/MS) - RA**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0	0.40	ug/L			08/15/16 14:45	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	96		80 - 120		08/15/16 14:45	1			
Dibromofluoromethane (Surr)	95		76 - 132		08/15/16 14:45	1			
Toluene-d8 (Surr)	104		80 - 128		08/15/16 14:45	1			

**Client Sample ID: PW-6D-GW-090816**

**Lab Sample ID: 440-155030-2**

Date Collected: 08/09/16 07:45

Matrix: Water

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 14:47	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 14:47	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 14:47	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 14:47	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6D-GW-090816**

**Lab Sample ID: 440-155030-2**

**Matrix: Water**

Date Collected: 08/09/16 07:45

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		2.0	0.25	ug/L		08/14/16 14:47		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/14/16 14:47		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/14/16 14:47		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/14/16 14:47		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/14/16 14:47		1
Chloroethane	ND		1.0	0.40	ug/L		08/14/16 14:47		1
Chloroform	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Chloromethane	ND		1.0	0.25	ug/L		08/14/16 14:47		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/14/16 14:47		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Dibromomethane	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/14/16 14:47		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/14/16 14:47		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,2-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/14/16 14:47		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/14/16 14:47		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
2-Hexanone	ND		10	2.5	ug/L		08/14/16 14:47		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/14/16 14:47		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/14/16 14:47		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 14:47		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 14:47		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 14:47		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 14:47		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 14:47		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 14:47		1
Styrene	ND		1.0	0.25	ug/L		08/14/16 14:47		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/14/16 14:47		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/14/16 14:47		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 14:47		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6D-GW-090816**

**Lab Sample ID: 440-155030-2**

**Matrix: Water**

Date Collected: 08/09/16 07:45

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 14:47	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 14:47	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 14:47	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 14:47	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 14:47	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 14:47	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 14:47	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
<b>Trichloroethene</b>	<b>13</b>		1.0	0.25	ug/L			08/14/16 14:47	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 14:47	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 14:47	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:47	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 14:47	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 14:47	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 14:47	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		08/14/16 14:47	1
Dibromofluoromethane (Surr)	100		76 - 132		08/14/16 14:47	1
Toluene-d8 (Surr)	102		80 - 128		08/14/16 14:47	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	420		30	5.0	ug/L			08/26/16 11:55	10

**Client Sample ID: PW-6C-GW-090816**

**Lab Sample ID: 440-155030-3**

**Matrix: Water**

Date Collected: 08/09/16 08:10

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 15:14	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 15:14	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 15:14	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 15:14	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 15:14	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 15:14	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 15:14	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 15:14	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 15:14	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6C-GW-090816**

**Lab Sample ID: 440-155030-3**

**Matrix: Water**

Date Collected: 08/09/16 08:10

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 15:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 15:14	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 15:14	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
2,2-Dichloropropene	ND		1.0	0.40	ug/L			08/14/16 15:14	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 15:14	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 15:14	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 15:14	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/14/16 15:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/14/16 15:14	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/14/16 15:14	1
Naphthalene	ND		5.0	0.40	ug/L			08/14/16 15:14	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/14/16 15:14	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
o-Xylene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 15:14	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 15:14	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 15:14	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 15:14	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 15:14	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6C-GW-090816**

**Lab Sample ID: 440-155030-3**

**Matrix: Water**

Date Collected: 08/09/16 08:10  
Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
<b>Trichloroethene</b>	<b>9.9</b>		1.0	0.25	ug/L			08/14/16 15:14	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 15:14	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 15:14	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 15:14	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 15:14	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 15:14	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					08/14/16 15:14	1
Dibromofluoromethane (Surr)	100		76 - 132					08/14/16 15:14	1
Toluene-d8 (Surr)	104		80 - 128					08/14/16 15:14	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>160</b>		30	5.0	ug/L			08/26/16 12:11	10

**Client Sample ID: PW-6B-GW-090816**

**Lab Sample ID: 440-155030-4**

**Matrix: Water**

Date Collected: 08/09/16 08:35  
Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 15:40	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 15:40	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 15:40	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 15:40	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 15:40	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 15:40	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 15:40	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:40	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 15:40	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 15:40	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 15:40	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 15:40	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 15:40	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 15:40	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 15:40	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 15:40	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 15:40	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 15:40	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:40	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 15:40	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6B-GW-090816**

**Lab Sample ID: 440-155030-4**

**Matrix: Water**

Date Collected: 08/09/16 08:35

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/14/16 15:40		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/14/16 15:40		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/14/16 15:40		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/14/16 15:40		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
2-Hexanone	ND		10	2.5	ug/L		08/14/16 15:40		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/14/16 15:40		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/14/16 15:40		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 15:40		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 15:40		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 15:40		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 15:40		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 15:40		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
Styrene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/14/16 15:40		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/14/16 15:40		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
Toluene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/14/16 15:40		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 15:40		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 15:40		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
<b>Trichloroethene</b>	<b>7.2</b>		1.0	0.25	ug/L		08/14/16 15:40		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/14/16 15:40		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/14/16 15:40		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 15:40		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/14/16 15:40		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/14/16 15:40		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		08/14/16 15:40	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-6B-GW-090816**

**Lab Sample ID: 440-155030-4**

Matrix: Water

Date Collected: 08/09/16 08:35

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		76 - 132		08/14/16 15:40	1
Toluene-d8 (Surr)	106		80 - 128		08/14/16 15:40	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	99		3.0	0.50	ug/L			08/25/16 21:12	1

**Client Sample ID: PW-5E-GW-090816**

**Lab Sample ID: 440-155030-5**

Matrix: Water

Date Collected: 08/09/16 10:30

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 16:06	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 16:06	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 16:06	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 16:06	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 16:06	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 16:06	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 16:06	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 16:06	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 16:06	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 16:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 16:06	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 16:06	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/14/16 16:06	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5E-GW-090816**

**Lab Sample ID: 440-155030-5**

**Matrix: Water**

Date Collected: 08/09/16 10:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 16:06	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 16:06	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 16:06	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 16:06	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/14/16 16:06	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/14/16 16:06	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/14/16 16:06	1
Naphthalene	ND		5.0	0.40	ug/L			08/14/16 16:06	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/14/16 16:06	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
o-Xylene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 16:06	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 16:06	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 16:06	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:06	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:06	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
<b>Trichloroethene</b>	<b>18</b>		1.0	0.25	ug/L			08/14/16 16:06	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 16:06	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 16:06	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:06	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 16:06	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 16:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			80 - 120				08/14/16 16:06	1
Dibromofluoromethane (Surr)	102			76 - 132				08/14/16 16:06	1
Toluene-d8 (Surr)	104			80 - 128				08/14/16 16:06	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	320		30	5.0	ug/L			08/26/16 12:26	10

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5D-GW-090816**

**Lab Sample ID: 440-155030-6**

**Matrix: Water**

Date Collected: 08/09/16 11:00

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L		08/14/16 16:32		1
Benzene	ND		0.50	0.25	ug/L		08/14/16 16:32		1
Bromobenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Bromoform	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Bromomethane	ND		2.0	0.25	ug/L		08/14/16 16:32		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/14/16 16:32		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/14/16 16:32		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/14/16 16:32		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/14/16 16:32		1
Chloroethane	ND		1.0	0.40	ug/L		08/14/16 16:32		1
Chloroform	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Chloromethane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 16:32		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 16:32		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/14/16 16:32		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Dibromomethane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/14/16 16:32		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/14/16 16:32		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 16:32		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/14/16 16:32		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/14/16 16:32		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/14/16 16:32		1
2-Hexanone	ND		10	2.5	ug/L		08/14/16 16:32		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/14/16 16:32		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/14/16 16:32		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/14/16 16:32		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 16:32		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 16:32		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 16:32		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 16:32		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 16:32		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 16:32		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 16:32		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5D-GW-090816**

Date Collected: 08/09/16 11:00

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155030-6**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 16:32	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:32	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 16:32	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 16:32	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 16:32	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:32	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/14/16 16:32	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 16:32	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:32	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:32	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:32	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:32	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:32	1
<b>Trichloroethylene</b>	<b>23</b>		1.0	0.25	ug/L			08/14/16 16:32	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 16:32	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 16:32	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:32	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:32	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 16:32	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 16:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					08/14/16 16:32	1
Dibromofluoromethane (Surr)	100		76 - 132					08/14/16 16:32	1
Toluene-d8 (Surr)	107		80 - 128					08/14/16 16:32	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	510		30	5.0	ug/L			08/26/16 12:42	10

**Client Sample ID: PW-5D-GW-090816-D**

Date Collected: 08/09/16 11:10

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155030-7**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 16:59	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 16:59	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 16:59	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 16:59	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 16:59	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 16:59	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 16:59	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5D-GW-090816-D**

**Lab Sample ID: 440-155030-7**

Date Collected: 08/09/16 11:10

Matrix: Water

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 16:59	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 16:59	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 16:59	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 16:59	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 16:59	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/14/16 16:59	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 16:59	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 16:59	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 16:59	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 16:59	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/14/16 16:59	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/14/16 16:59	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/14/16 16:59	1
Naphthalene	ND		5.0	0.40	ug/L			08/14/16 16:59	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/14/16 16:59	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
o-Xylene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 16:59	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 16:59	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 16:59	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5D-GW-090816-D**

**Lab Sample ID: 440-155030-7**

**Matrix: Water**

Date Collected: 08/09/16 11:10

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 16:59	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:59	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 16:59	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
<b>Trichloroethene</b>	<b>21</b>		1.0	0.25	ug/L			08/14/16 16:59	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 16:59	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 16:59	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 16:59	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 16:59	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 16:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		80 - 120					08/14/16 16:59	1
Dibromofluoromethane (Surr)	103		76 - 132					08/14/16 16:59	1
Toluene-d8 (Surr)	105		80 - 128					08/14/16 16:59	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	500		30	5.0	ug/L			08/28/16 14:10	10

**Client Sample ID: PW-5C-GW-090816**

**Lab Sample ID: 440-155030-8**

**Matrix: Water**

Date Collected: 08/09/16 11:35

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 17:25	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 17:25	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 17:25	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 17:25	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 17:25	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 17:25	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 17:25	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 17:25	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 17:25	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 17:25	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5C-GW-090816**

**Lab Sample ID: 440-155030-8**

**Matrix: Water**

Date Collected: 08/09/16 11:35

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 17:25	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 17:25	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 17:25	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/14/16 17:25	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 17:25	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 17:25	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 17:25	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 17:25	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/14/16 17:25	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/14/16 17:25	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/14/16 17:25	1
Naphthalene	ND		5.0	0.40	ug/L			08/14/16 17:25	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/14/16 17:25	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
o-Xylene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
Styrene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 17:25	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 17:25	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 17:25	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 17:25	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 17:25	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
<b>Trichloroethene</b>	<b>29</b>		1.0	0.25	ug/L			08/14/16 17:25	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 17:25	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 17:25	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5C-GW-090816**

**Lab Sample ID: 440-155030-8**

**Matrix: Water**

Date Collected: 08/09/16 11:35

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 17:25	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 17:25	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					08/14/16 17:25	1
Dibromofluoromethane (Surr)	98		76 - 132					08/14/16 17:25	1
Toluene-d8 (Surr)	103		80 - 128					08/14/16 17:25	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	160		30	5.0	ug/L			08/26/16 13:02	10

**Client Sample ID: PW-5B-GW-090816**

**Lab Sample ID: 440-155030-9**

**Matrix: Water**

Date Collected: 08/09/16 12:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 17:51	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 17:51	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 17:51	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 17:51	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 17:51	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 17:51	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 17:51	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 17:51	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 17:51	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 17:51	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 17:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 17:51	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 17:51	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 17:51	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 17:51	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5B-GW-090816**

**Lab Sample ID: 440-155030-9**

**Matrix: Water**

Date Collected: 08/09/16 12:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/14/16 17:51		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/14/16 17:51		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
2-Hexanone	ND		10	2.5	ug/L		08/14/16 17:51		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/14/16 17:51		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/14/16 17:51		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 17:51		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 17:51		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 17:51		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 17:51		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 17:51		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
Styrene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/14/16 17:51		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/14/16 17:51		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
Toluene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/14/16 17:51		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 17:51		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 17:51		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
<b>Trichloroethene</b>	<b>18</b>		1.0	0.25	ug/L		08/14/16 17:51		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/14/16 17:51		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/14/16 17:51		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 17:51		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/14/16 17:51		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/14/16 17:51		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	100		80 - 120				08/14/16 17:51		1
Dibromofluoromethane (Surr)	103		76 - 132				08/14/16 17:51		1
Toluene-d8 (Surr)	103		80 - 128				08/14/16 17:51		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5B-GW-090816**

**Lab Sample ID: 440-155030-9**

Matrix: Water

Date Collected: 08/09/16 12:15

Date Received: 08/09/16 19:00

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	63		3.0	0.50	ug/L			08/25/16 22:56	1

**Client Sample ID: PW-5A-GW-090816**

**Lab Sample ID: 440-155030-10**

Matrix: Water

Date Collected: 08/09/16 12:45

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 18:18	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 18:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Bromoform	ND		1.0	0.40	ug/L			08/14/16 18:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/14/16 18:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/14/16 18:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/14/16 18:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/14/16 18:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/14/16 18:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/14/16 18:18	1
Chloroform	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 18:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/14/16 18:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/14/16 18:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/14/16 18:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/14/16 18:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/14/16 18:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/14/16 18:18	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/14/16 18:18	1
2-Hexanone	ND		10	2.5	ug/L			08/14/16 18:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/14/16 18:18	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/14/16 18:18	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/14/16 18:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: PW-5A-GW-090816**

**Lab Sample ID: 440-155030-10**

Matrix: Water

Date Collected: 08/09/16 12:45

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 18:18		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 18:18		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 18:18		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 18:18		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 18:18		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
Styrene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/14/16 18:18		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/14/16 18:18		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 18:18		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/14/16 18:18		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
Toluene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/14/16 18:18		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 18:18		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 18:18		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/14/16 18:18		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 18:18		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/14/16 18:18		1
<b>Trichloroethene</b>	<b>1.5</b>		1.0	0.25	ug/L		08/14/16 18:18		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/14/16 18:18		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/14/16 18:18		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:18		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/14/16 18:18		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/14/16 18:18		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99			80 - 120			08/14/16 18:18		1
Dibromofluoromethane (Surr)	100			76 - 132			08/14/16 18:18		1
Toluene-d8 (Surr)	103			80 - 128			08/14/16 18:18		1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	39		3.0	0.50	ug/L			08/25/16 23:13	1

**Client Sample ID: EB-LW-090816**

**Lab Sample ID: 440-155030-11**

Matrix: Water

Date Collected: 08/09/16 13:00

Date Received: 08/09/16 19:00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/14/16 18:44	1
Benzene	ND		0.50	0.25	ug/L			08/14/16 18:44	1
Bromobenzene	ND		1.0	0.25	ug/L			08/14/16 18:44	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: EB-LW-090816**

Date Collected: 08/09/16 13:00

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155030-11**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Bromodichloromethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Bromoform	ND		1.0	0.40	ug/L		08/14/16 18:44		1
Bromomethane	ND		2.0	0.25	ug/L		08/14/16 18:44		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/14/16 18:44		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/14/16 18:44		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/14/16 18:44		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/14/16 18:44		1
Chloroethane	ND		1.0	0.40	ug/L		08/14/16 18:44		1
Chloroform	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Chloromethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/14/16 18:44		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Dibromomethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/14/16 18:44		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/14/16 18:44		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,2-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
2,2-Dichloropropene	ND		1.0	0.40	ug/L		08/14/16 18:44		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/14/16 18:44		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
2-Hexanone	ND		10	2.5	ug/L		08/14/16 18:44		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/14/16 18:44		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/14/16 18:44		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/14/16 18:44		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/14/16 18:44		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/14/16 18:44		1
Naphthalene	ND		5.0	0.40	ug/L		08/14/16 18:44		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/14/16 18:44		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
o-Xylene	ND		1.0	0.25	ug/L		08/14/16 18:44		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/14/16 18:44		1
Styrene	ND		1.0	0.25	ug/L		08/14/16 18:44		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: EB-LW-090816**

Date Collected: 08/09/16 13:00

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155030-11**

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/14/16 18:44	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/14/16 18:44	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/14/16 18:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 18:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/14/16 18:44	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/14/16 18:44	1
Toluene	ND		1.0	0.25	ug/L			08/14/16 18:44	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/14/16 18:44	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/14/16 18:44	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/14/16 18:44	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 18:44	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/14/16 18:44	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 18:44	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/14/16 18:44	1
Trichloroethene	ND		1.0	0.25	ug/L			08/14/16 18:44	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/14/16 18:44	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/14/16 18:44	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 18:44	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/14/16 18:44	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/14/16 18:44	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/14/16 18:44	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120					08/14/16 18:44	1
Dibromofluoromethane (Surr)	99		76 - 132					08/14/16 18:44	1
Toluene-d8 (Surr)	108		80 - 128					08/14/16 18:44	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 23:29	1

TestAmerica Irvine

## Method Summary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Client Sample ID: TB-LW-090816**

**Lab Sample ID: 440-155030-1**

Matrix: Water

Date Collected: 08/09/16 07:00

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 14:21	ATL	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349130	08/15/16 14:45	TCN	TAL IRV

**Client Sample ID: PW-6D-GW-090816**

**Lab Sample ID: 440-155030-2**

Matrix: Water

Date Collected: 08/09/16 07:45

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 14:47	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 11:55	CTH	TAL IRV

**Client Sample ID: PW-6C-GW-090816**

**Lab Sample ID: 440-155030-3**

Matrix: Water

Date Collected: 08/09/16 08:10

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 15:14	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 12:11	CTH	TAL IRV

**Client Sample ID: PW-6B-GW-090816**

**Lab Sample ID: 440-155030-4**

Matrix: Water

Date Collected: 08/09/16 08:35

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 15:40	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/25/16 21:12	TLN	TAL IRV

**Client Sample ID: PW-5E-GW-090816**

**Lab Sample ID: 440-155030-5**

Matrix: Water

Date Collected: 08/09/16 10:30

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 16:06	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 12:26	CTH	TAL IRV

**Client Sample ID: PW-5D-GW-090816**

**Lab Sample ID: 440-155030-6**

Matrix: Water

Date Collected: 08/09/16 11:00

Date Received: 08/09/16 19:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 16:32	ATL	TAL IRV

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

### Client Sample ID: PW-5D-GW-090816

Date Collected: 08/09/16 11:00  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 12:42	CTH	TAL IRV

### Client Sample ID: PW-5D-GW-090816-D

Date Collected: 08/09/16 11:10  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 16:59	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		10			352317	08/28/16 14:10	CTH	TAL IRV

### Client Sample ID: PW-5C-GW-090816

Date Collected: 08/09/16 11:35  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 17:25	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 13:02	CTH	TAL IRV

### Client Sample ID: PW-5B-GW-090816

Date Collected: 08/09/16 12:15  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 17:51	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/25/16 22:56	TLN	TAL IRV

### Client Sample ID: PW-5A-GW-090816

Date Collected: 08/09/16 12:45  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 18:18	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/25/16 23:13	TLN	TAL IRV

### Client Sample ID: EB-LW-090816

Date Collected: 08/09/16 13:00  
Date Received: 08/09/16 19:00

### Lab Sample ID: 440-155030-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349062	08/14/16 18:44	ATL	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/25/16 23:29	TLN	TAL IRV

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-349062/4**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		40	20	ug/L			08/14/16 10:25	1
Benzene	ND		1.0	0.50	ug/L			08/14/16 10:25	1
Bromobenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Bromochloromethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Bromodichloromethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Bromoform	ND		2.0	0.80	ug/L			08/14/16 10:25	1
Bromomethane	ND		4.0	0.50	ug/L			08/14/16 10:25	1
1,3-Butadiene	ND		2.0	1.0	ug/L			08/14/16 10:25	1
2-Butanone (MEK)	ND		20	5.0	ug/L			08/14/16 10:25	1
Carbon disulfide	ND		4.0	1.0	ug/L			08/14/16 10:25	1
Carbon tetrachloride	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Chlorobenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
2-Chloro-1,3-butadiene	ND		4.0	1.0	ug/L			08/14/16 10:25	1
Chloroethane	ND		2.0	0.80	ug/L			08/14/16 10:25	1
Chloroform	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Chloromethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
2-Chlorotoluene	ND		4.0	0.50	ug/L			08/14/16 10:25	1
4-Chlorotoluene	ND		4.0	0.50	ug/L			08/14/16 10:25	1
cis-1,2-Dichloroethene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
cis-1,3-Dichloropropene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Dibromochloromethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,2-Dibromo-3-Chloropropane	ND		4.0	1.0	ug/L			08/14/16 10:25	1
1,2-Dibromoethane (EDB)	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Dibromomethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,2-Dichlorobenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,3-Dichlorobenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,4-Dichlorobenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Dichlorodifluoromethane	ND		2.0	0.80	ug/L			08/14/16 10:25	1
1,1-Dichloroethane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			08/14/16 10:25	1
1,1-Dichloroethene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,2-Dichloropropane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
1,3-Dichloropropane	ND		2.0	0.50	ug/L			08/14/16 10:25	1
2,2-Dichloropropane	ND		2.0	0.80	ug/L			08/14/16 10:25	1
1,1-Dichloropropene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Ethylbenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Ethyl-t-butyl ether (ETBE)	ND		4.0	0.50	ug/L			08/14/16 10:25	1
Hexachlorobutadiene	ND		4.0	0.50	ug/L			08/14/16 10:25	1
2-Hexanone	ND		20	5.0	ug/L			08/14/16 10:25	1
Isopropylbenzene	ND		2.0	0.50	ug/L			08/14/16 10:25	1
Isopropyl Ether (DIPE)	ND		4.0	0.50	ug/L			08/14/16 10:25	1
Methylene Chloride	ND		10	1.8	ug/L			08/14/16 10:25	1
4-Methyl-2-pentanone (MIBK)	ND		20	5.0	ug/L			08/14/16 10:25	1
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.50	ug/L			08/14/16 10:25	1
m,p-Xylene	ND		2.0	1.0	ug/L			08/14/16 10:25	1
Naphthalene	ND		10	0.80	ug/L			08/14/16 10:25	1
n-Butylbenzene	ND		4.0	0.80	ug/L			08/14/16 10:25	1
N-Propylbenzene	ND		4.0	0.50	ug/L			08/14/16 10:25	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-349062/4**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
p-Isopropyltoluene	ND				4.0	0.50	ug/L			08/14/16 10:25	1
sec-Butylbenzene	ND				4.0	0.50	ug/L			08/14/16 10:25	1
Styrene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
Tert-amyl-methyl ether (TAME)	ND				4.0	0.50	ug/L			08/14/16 10:25	1
tert-Butyl alcohol (TBA)	ND				20	10	ug/L			08/14/16 10:25	1
tert-Butylbenzene	ND				4.0	0.50	ug/L			08/14/16 10:25	1
1,1,1,2-Tetrachloroethane	ND				2.0	0.50	ug/L			08/14/16 10:25	1
1,1,2,2-Tetrachloroethane	ND				2.0	0.50	ug/L			08/14/16 10:25	1
Tetrachloroethene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
Toluene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
trans-1,4-Dichloro-2-butene	ND				10	5.0	ug/L			08/14/16 10:25	1
trans-1,2-Dichloroethene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
trans-1,3-Dichloropropene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
1,2,3-Trichlorobenzene	ND				4.0	0.80	ug/L			08/14/16 10:25	1
1,2,4-Trichlorobenzene	ND				4.0	0.80	ug/L			08/14/16 10:25	1
1,1,1-Trichloroethane	ND				2.0	0.50	ug/L			08/14/16 10:25	1
1,1,2-Trichloroethane	ND				2.0	0.50	ug/L			08/14/16 10:25	1
Trichloroethene	ND				2.0	0.50	ug/L			08/14/16 10:25	1
Trichlorofluoromethane	ND				2.0	0.50	ug/L			08/14/16 10:25	1
1,2,3-Trichloropropane	ND				4.0	0.80	ug/L			08/14/16 10:25	1
1,2,4-Trimethylbenzene	ND				4.0	0.50	ug/L			08/14/16 10:25	1
1,3,5-Trimethylbenzene	ND				4.0	0.50	ug/L			08/14/16 10:25	1
Vinyl chloride	ND				1.0	0.50	ug/L			08/14/16 10:25	1
Xylenes, Total	ND				4.0	1.0	ug/L			08/14/16 10:25	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	101		80 - 120				08/14/16 10:25	1
Dibromofluoromethane (Surr)	100		76 - 132				08/14/16 10:25	1
Toluene-d8 (Surr)	102		80 - 128				08/14/16 10:25	1

**Lab Sample ID: LCS 440-349062/5**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	29.9		ug/L		120	10 - 150
Benzene	25.0	24.6		ug/L		98	68 - 130
Bromobenzene	25.0	24.6		ug/L		98	70 - 130
Bromochloromethane	25.0	26.6		ug/L		106	70 - 130
Bromodichloromethane	25.0	26.2		ug/L		105	70 - 132
Bromoform	25.0	28.6		ug/L		114	60 - 148
Bromomethane	25.0	24.9		ug/L		99	64 - 139
2-Butanone (MEK)	25.0	26.4		ug/L		106	44 - 150
Carbon disulfide	25.0	25.1		ug/L		100	52 - 136
Carbon tetrachloride	25.0	26.1		ug/L		104	60 - 150
Chlorobenzene	25.0	24.0		ug/L		96	70 - 130
Chloroethane	25.0	25.3		ug/L		101	64 - 135

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-349062/5**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	25.0	25.8		ug/L	103	70 - 130	
Chloromethane	25.0	24.7		ug/L	99	47 - 140	
2-Chlorotoluene	25.0	25.0		ug/L	100	70 - 130	
4-Chlorotoluene	25.0	25.1		ug/L	100	70 - 130	
cis-1,2-Dichloroethene	25.0	26.2		ug/L	105	70 - 133	
cis-1,3-Dichloropropene	25.0	27.5		ug/L	110	70 - 133	
Dibromochloromethane	25.0	27.0		ug/L	108	69 - 145	
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L	108	52 - 140	
1,2-Dibromoethane (EDB)	25.0	26.2		ug/L	105	70 - 130	
Dibromomethane	25.0	25.1		ug/L	100	70 - 130	
1,2-Dichlorobenzene	25.0	25.1		ug/L	100	70 - 130	
1,3-Dichlorobenzene	25.0	24.4		ug/L	98	70 - 130	
1,4-Dichlorobenzene	25.0	24.1		ug/L	96	70 - 130	
Dichlorodifluoromethane	25.0	26.0		ug/L	104	29 - 150	
1,1-Dichloroethane	25.0	25.3		ug/L	101	64 - 130	
1,2-Dichloroethane	25.0	26.6		ug/L	107	57 - 138	
1,1-Dichloroethene	25.0	25.2		ug/L	101	70 - 130	
1,2-Dichloropropene	25.0	25.9		ug/L	104	67 - 130	
1,3-Dichloropropene	25.0	25.2		ug/L	101	70 - 130	
2,2-Dichloropropene	25.0	26.4		ug/L	106	68 - 141	
1,1-Dichloropropene	25.0	25.6		ug/L	102	70 - 130	
Ethylbenzene	25.0	24.9		ug/L	100	70 - 130	
Ethyl-t-butyl ether (ETBE)	25.0	27.2		ug/L	109	60 - 136	
Hexachlorobutadiene	25.0	26.8		ug/L	107	10 - 150	
2-Hexanone	25.0	27.3		ug/L	109	10 - 150	
Isopropylbenzene	25.0	25.2		ug/L	101	70 - 136	
Isopropyl Ether (DIPE)	25.0	28.2		ug/L	113	58 - 139	
Methylene Chloride	25.0	26.1		ug/L	104	52 - 130	
4-Methyl-2-pentanone (MIBK)	25.0	27.9		ug/L	112	59 - 149	
Methyl-t-Butyl Ether (MTBE)	25.0	27.0		ug/L	108	63 - 131	
m,p-Xylene	25.0	25.3		ug/L	101	70 - 130	
Naphthalene	25.0	26.4		ug/L	106	60 - 140	
n-Butylbenzene	25.0	25.2		ug/L	101	65 - 150	
N-Propylbenzene	25.0	24.7		ug/L	99	67 - 139	
o-Xylene	25.0	25.0		ug/L	100	70 - 130	
p-Isopropyltoluene	25.0	24.7		ug/L	99	70 - 132	
sec-Butylbenzene	25.0	23.9		ug/L	96	70 - 138	
Styrene	25.0	25.5		ug/L	102	70 - 134	
Tert-amyl-methyl ether (TAME)	25.0	26.7		ug/L	107	57 - 139	
tert-Butyl alcohol (TBA)	250	262		ug/L	105	70 - 130	
tert-Butylbenzene	25.0	24.6		ug/L	98	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L	99	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L	95	63 - 130	
Tetrachloroethene	25.0	23.9		ug/L	96	70 - 130	
Toluene	25.0	24.9		ug/L	100	70 - 130	
trans-1,2-Dichloroethene	25.0	25.4		ug/L	102	70 - 130	
trans-1,3-Dichloropropene	25.0	27.3		ug/L	109	70 - 132	
1,2,3-Trichlorobenzene	25.0	26.5		ug/L	106	60 - 140	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-349062/5**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,2,4-Trichlorobenzene	25.0	27.4		ug/L		110	60 - 140
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
1,1,2-Trichloroethane	25.0	25.4		ug/L		101	70 - 130
Trichloroethylene	25.0	25.4		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	28.4		ug/L		114	60 - 150
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	63 - 130
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	70 - 135
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	70 - 136
Vinyl chloride	25.0	26.3		ug/L		105	59 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		76 - 132
Toluene-d8 (Surr)	100		80 - 128

**Lab Sample ID: 440-154834-C-2 MS**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	25.8		ug/L		103	10 - 150
Benzene	ND		25.0	23.7		ug/L		95	66 - 130
Bromobenzene	ND		25.0	24.0		ug/L		96	70 - 130
Bromochloromethane	ND		25.0	25.4		ug/L		102	70 - 130
Bromodichloromethane	ND		25.0	26.7		ug/L		107	70 - 138
Bromoform	ND		25.0	26.9		ug/L		108	59 - 150
Bromomethane	ND		25.0	24.2		ug/L		97	62 - 131
2-Butanone (MEK)	ND		25.0	24.7		ug/L		99	48 - 140
Carbon disulfide	ND		25.0	24.0		ug/L		96	49 - 140
Carbon tetrachloride	ND		25.0	26.2		ug/L		105	60 - 150
Chlorobenzene	ND		25.0	23.3		ug/L		93	70 - 130
Chloroethane	ND		25.0	24.7		ug/L		99	68 - 130
Chloroform	ND		25.0	25.4		ug/L		102	70 - 130
Chloromethane	ND		25.0	23.9		ug/L		96	39 - 144
2-Chlorotoluene	ND		25.0	24.7		ug/L		99	70 - 130
4-Chlorotoluene	ND		25.0	24.9		ug/L		99	70 - 130
cis-1,2-Dichloroethene	22		25.0	47.5		ug/L		102	70 - 130
cis-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	70 - 133
Dibromochloromethane	ND		25.0	25.8		ug/L		103	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	26.0		ug/L		104	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	25.6		ug/L		102	70 - 131
Dibromomethane	ND		25.0	25.7		ug/L		103	70 - 130
1,2-Dichlorobenzene	ND		25.0	24.2		ug/L		97	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	ND		25.0	23.9		ug/L		96	70 - 130
Dichlorodifluoromethane	ND		25.0	24.2		ug/L		97	25 - 142
1,1-Dichloroethane	0.41 J		25.0	24.9		ug/L		98	65 - 130
1,2-Dichloroethane	1.1		25.0	28.8		ug/L		111	56 - 146

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-154834-C-2 MS**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier					
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	70 - 130	
1,2-Dichloropropane	ND		25.0	25.1		ug/L		100	69 - 130	
1,3-Dichloropropane	ND		25.0	24.3		ug/L		97	70 - 130	
2,2-Dichloropropane	ND		25.0	26.4		ug/L		106	69 - 138	
1,1-Dichloropropene	ND		25.0	25.8		ug/L		103	64 - 130	
Ethylbenzene	ND		25.0	23.6		ug/L		94	70 - 130	
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.7		ug/L		107	70 - 130	
Hexachlorobutadiene	ND		25.0	25.4		ug/L		102	10 - 150	
2-Hexanone	ND		25.0	25.9		ug/L		104	10 - 150	
Isopropylbenzene	ND		25.0	24.0		ug/L		96	70 - 132	
Isopropyl Ether (DIPE)	ND		25.0	27.5		ug/L		110	64 - 138	
Methylene Chloride	ND		25.0	24.6		ug/L		99	52 - 130	
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.0		ug/L		108	52 - 150	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.5		ug/L		102	70 - 130	
m,p-Xylene	ND		25.0	24.1		ug/L		96	70 - 133	
Naphthalene	ND		25.0	26.2		ug/L		105	60 - 140	
n-Butylbenzene	ND		25.0	24.7		ug/L		99	61 - 149	
N-Propylbenzene	ND		25.0	23.9		ug/L		96	66 - 135	
o-Xylene	ND		25.0	23.9		ug/L		96	70 - 133	
p-Isopropyltoluene	ND		25.0	23.7		ug/L		95	70 - 130	
sec-Butylbenzene	ND		25.0	23.5		ug/L		94	67 - 134	
Styrene	ND		25.0	23.4		ug/L		94	29 - 150	
Tert-amyl-methyl ether (TAME)	ND		25.0	26.5		ug/L		106	68 - 133	
tert-Butyl alcohol (TBA)	ND		250	254		ug/L		102	70 - 130	
tert-Butylbenzene	ND		25.0	23.8		ug/L		95	70 - 130	
1,1,1,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	60 - 149	
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	63 - 130	
Tetrachloroethene	ND		25.0	22.7		ug/L		91	70 - 137	
Toluene	ND		25.0	23.6		ug/L		95	70 - 130	
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		97	70 - 130	
trans-1,3-Dichloropropene	ND		25.0	26.5		ug/L		106	70 - 138	
1,2,3-Trichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 140	
1,2,4-Trichlorobenzene	ND		25.0	26.6		ug/L		106	60 - 140	
1,1,1-Trichloroethane	ND		25.0	26.3		ug/L		105	70 - 130	
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	70 - 130	
Trichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	
Trichlorofluoromethane	ND		25.0	27.1		ug/L		109	60 - 150	
1,2,3-Trichloropropane	ND		25.0	24.8		ug/L		99	60 - 130	
1,2,4-Trimethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130	
1,3,5-Trimethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	
Vinyl chloride	16		25.0	39.7		ug/L		94	50 - 137	
<b>Surrogate</b>										
		MS	MS							
		%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)		98		80 - 120						
Dibromofluoromethane (Surr)		102		76 - 132						
Toluene-d8 (Surr)		99		80 - 128						

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-154834-C-2 MSD**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Acetone	ND		25.0	25.3		ug/L	101	10 - 150	2	35		
Benzene	ND		25.0	24.1		ug/L	96	66 - 130	2	20		
Bromobenzene	ND		25.0	24.6		ug/L	99	70 - 130	3	20		
Bromochloromethane	ND		25.0	25.9		ug/L	104	70 - 130	2	25		
Bromodichloromethane	ND		25.0	26.3		ug/L	105	70 - 138	1	20		
Bromoform	ND		25.0	26.8		ug/L	107	59 - 150	0	25		
Bromomethane	ND		25.0	24.9		ug/L	99	62 - 131	3	25		
2-Butanone (MEK)	ND		25.0	24.8		ug/L	99	48 - 140	0	40		
Carbon disulfide	ND		25.0	24.5		ug/L	98	49 - 140	2	20		
Carbon tetrachloride	ND		25.0	25.8		ug/L	103	60 - 150	2	25		
Chlorobenzene	ND		25.0	23.1		ug/L	92	70 - 130	1	20		
Chloroethane	ND		25.0	25.1		ug/L	100	68 - 130	2	25		
Chloroform	ND		25.0	26.0		ug/L	104	70 - 130	2	20		
Chloromethane	ND		25.0	24.2		ug/L	97	39 - 144	1	25		
2-Chlorotoluene	ND		25.0	25.2		ug/L	101	70 - 130	2	20		
4-Chlorotoluene	ND		25.0	25.0		ug/L	100	70 - 130	1	20		
cis-1,2-Dichloroethene	22		25.0	46.8		ug/L	100	70 - 130	1	20		
cis-1,3-Dichloropropene	ND		25.0	25.9		ug/L	103	70 - 133	3	20		
Dibromochloromethane	ND		25.0	25.7		ug/L	103	70 - 148	0	25		
1,2-Dibromo-3-Chloropropane	ND		25.0	27.6		ug/L	110	48 - 140	6	30		
1,2-Dibromoethane (EDB)	ND		25.0	25.3		ug/L	101	70 - 131	1	25		
Dibromomethane	ND		25.0	25.3		ug/L	101	70 - 130	1	25		
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L	100	70 - 130	3	20		
1,3-Dichlorobenzene	ND		25.0	24.6		ug/L	98	70 - 130	2	20		
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L	99	70 - 130	3	20		
Dichlorodifluoromethane	ND		25.0	24.5		ug/L	98	25 - 142	1	30		
1,1-Dichloroethane	0.41	J	25.0	25.1		ug/L	99	65 - 130	1	20		
1,2-Dichloroethane	1.1		25.0	29.3		ug/L	113	56 - 146	2	20		
1,1-Dichloroethene	ND		25.0	23.7		ug/L	95	70 - 130	3	20		
1,2-Dichloropropane	ND		25.0	25.4		ug/L	102	69 - 130	1	20		
1,3-Dichloropropane	ND		25.0	23.8		ug/L	95	70 - 130	2	25		
2,2-Dichloropropane	ND		25.0	27.6		ug/L	110	69 - 138	5	25		
1,1-Dichloropropene	ND		25.0	25.9		ug/L	104	64 - 130	0	20		
Ethylbenzene	ND		25.0	23.5		ug/L	94	70 - 130	0	20		
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.9		ug/L	107	70 - 130	1	25		
Hexachlorobutadiene	ND		25.0	26.6		ug/L	106	10 - 150	5	20		
2-Hexanone	ND		25.0	26.1		ug/L	104	10 - 150	1	35		
Isopropylbenzene	ND		25.0	23.7		ug/L	95	70 - 132	1	20		
Isopropyl Ether (DIPE)	ND		25.0	27.2		ug/L	109	64 - 138	1	25		
Methylene Chloride	ND		25.0	25.5		ug/L	102	52 - 130	3	20		
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.9		ug/L	108	52 - 150	0	35		
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.5		ug/L	106	70 - 130	4	25		
m,p-Xylene	ND		25.0	23.7		ug/L	95	70 - 133	2	25		
Naphthalene	ND		25.0	27.9		ug/L	111	60 - 140	6	30		
n-Butylbenzene	ND		25.0	24.7		ug/L	99	61 - 149	0	20		
N-Propylbenzene	ND		25.0	24.5		ug/L	98	66 - 135	3	20		
o-Xylene	ND		25.0	23.6		ug/L	95	70 - 133	1	20		
p-Isopropyltoluene	ND		25.0	24.0		ug/L	96	70 - 130	1	20		

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-154834-C-2 MSD**

**Matrix: Water**

**Analysis Batch: 349062**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	ND		25.0	23.5		ug/L		94	67 - 134	0	20
Styrene	ND		25.0	23.7		ug/L		95	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		25.0	26.7		ug/L		107	68 - 133	1	30
tert-Butyl alcohol (TBA)	ND		250	253		ug/L		101	70 - 130	1	25
tert-Butylbenzene	ND		25.0	24.5		ug/L		98	70 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.1		ug/L		97	60 - 149	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.9		ug/L		100	63 - 130	4	30
Tetrachloroethylene	ND		25.0	22.7		ug/L		91	70 - 137	0	20
Toluene	ND		25.0	23.2		ug/L		93	70 - 130	2	20
trans-1,2-Dichloroethylene	ND		25.0	25.1		ug/L		101	70 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	70 - 138	1	25
1,2,3-Trichlorobenzene	ND		25.0	27.0		ug/L		108	60 - 140	5	20
1,2,4-Trichlorobenzene	ND		25.0	27.5		ug/L		110	60 - 140	4	20
1,1,1-Trichloroethane	ND		25.0	26.5		ug/L		106	70 - 130	1	20
1,1,2-Trichloroethane	ND		25.0	24.3		ug/L		97	70 - 130	2	25
Trichloroethylene	ND		25.0	24.6		ug/L		98	70 - 130	1	20
Trichlorofluoromethane	ND		25.0	26.7		ug/L		107	60 - 150	2	25
1,2,3-Trichloropropane	ND		25.0	25.3		ug/L		101	60 - 130	2	30
1,2,4-Trimethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	1	25
1,3,5-Trimethylbenzene	ND		25.0	24.7		ug/L		99	70 - 130	1	20
Vinyl chloride	16		25.0	38.5		ug/L		90	50 - 137	3	30

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		76 - 132
Toluene-d8 (Surr)	96		80 - 128

**Lab Sample ID: MB 440-349130/4**

**Matrix: Water**

**Analysis Batch: 349130**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	0.585	J	5.0	0.40	ug/L			08/15/16 07:50	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	94		80 - 120		08/15/16 07:50	1
Dibromofluoromethane (Surr)	89		76 - 132		08/15/16 07:50	1
Toluene-d8 (Surr)	104		80 - 128		08/15/16 07:50	1

**Lab Sample ID: LCS 440-349130/5**

**Matrix: Water**

**Analysis Batch: 349130**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Naphthalene	25.0	25.0		ug/L		100	60 - 140

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-349130/5**

**Matrix: Water**

**Analysis Batch: 349130**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	85		76 - 132
Toluene-d8 (Surr)	105		80 - 128

**Lab Sample ID: 720-73884-A-1 MS**

**Matrix: Water**

**Analysis Batch: 349130**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	MS Unit	D	%Rec	%Rec.
Naphthalene	0.59	J B	25.0	23.2		ug/L		90	60 - 140
									Limits

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	86		76 - 132
Toluene-d8 (Surr)	104		80 - 128

**Lab Sample ID: 720-73884-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 349130**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	MSD Unit	D	%Rec.	RPD
Naphthalene	0.59	J B	25.0	23.8		ug/L		93	60 - 140
									RPD Limit

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	87		76 - 132
Toluene-d8 (Surr)	104		80 - 128

## Method: 314.0 LL - Perchlorate (IC)

**Lab Sample ID: MB 440-351512/107**

**Matrix: Water**

**Analysis Batch: 351512**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 19:31	

**Lab Sample ID: LCS 440-351512/108**

**Matrix: Water**

**Analysis Batch: 351512**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	LCS Unit	D	%Rec.
Perchlorate	25.0	22.5		ug/L		90
						Limits

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## Method: 314.0 LL - Perchlorate (IC) (Continued)

**Lab Sample ID:** MRL 440-351512/88

**Matrix:** Water

**Analysis Batch:** 351512

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Perchlorate	4.00	4.04		ug/L	101	75 - 125	

**Lab Sample ID:** MB 440-352030/3

**Matrix:** Water

**Analysis Batch:** 352030

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		3.0	0.50	ug/L			08/26/16 09:44	1

**Lab Sample ID:** LCS 440-352030/2

**Matrix:** Water

**Analysis Batch:** 352030

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Perchlorate	25.0	24.1		ug/L	97	85 - 115	

**Lab Sample ID:** MRL 440-352030/5

**Matrix:** Water

**Analysis Batch:** 352030

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Perchlorate	4.00	3.30		ug/L	82	75 - 125	

**Lab Sample ID:** 440-155061-D-4 MS

**Matrix:** Water

**Analysis Batch:** 352030

**Client Sample ID:** Matrix Spike  
**Prep Type:** Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Perchlorate	35	F1	25.0	54.2	F1	ug/L	77	80 - 120	

**Lab Sample ID:** 440-155061-D-4 MSD

**Matrix:** Water

**Analysis Batch:** 352030

**Client Sample ID:** Matrix Spike Duplicate  
**Prep Type:** Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Perchlorate	35	F1	25.0	56.3		ug/L	85	80 - 120	4

**Lab Sample ID:** MB 440-352317/3

**Matrix:** Water

**Analysis Batch:** 352317

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		3.0	0.50	ug/L			08/28/16 09:32	1

**Lab Sample ID:** LCS 440-352317/2

**Matrix:** Water

**Analysis Batch:** 352317

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Perchlorate	25.0	23.7		ug/L	95	85 - 115	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

**Lab Sample ID: MRL 440-352317/5**

**Matrix: Water**

**Analysis Batch: 352317**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte		Spike	MRL	MRL	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Perchlorate		4.00	4.48		ug/L	112	75 - 125	

**Lab Sample ID: 440-156050-A-11 MS**

**Matrix: Water**

**Analysis Batch: 352317**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Perchlorate	1.8	J	25.0	26.6		ug/L	99	80 - 120	

**Lab Sample ID: 440-156050-A-11 MSD**

**Matrix: Water**

**Analysis Batch: 352317**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Perchlorate	1.8	J	25.0	26.7		ug/L	100	80 - 120	1

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## GC/MS VOA

### Analysis Batch: 349062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155030-1	TB-LW-090816	Total/NA	Water	8260B	
440-155030-2	PW-6D-GW-090816	Total/NA	Water	8260B	
440-155030-3	PW-6C-GW-090816	Total/NA	Water	8260B	
440-155030-4	PW-6B-GW-090816	Total/NA	Water	8260B	
440-155030-5	PW-5E-GW-090816	Total/NA	Water	8260B	
440-155030-6	PW-5D-GW-090816	Total/NA	Water	8260B	
440-155030-7	PW-5D-GW-090816-D	Total/NA	Water	8260B	
440-155030-8	PW-5C-GW-090816	Total/NA	Water	8260B	
440-155030-9	PW-5B-GW-090816	Total/NA	Water	8260B	
440-155030-10	PW-5A-GW-090816	Total/NA	Water	8260B	
440-155030-11	EB-LW-090816	Total/NA	Water	8260B	
MB 440-349062/4	Method Blank	Total/NA	Water	8260B	
LCS 440-349062/5	Lab Control Sample	Total/NA	Water	8260B	
440-154834-C-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-154834-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

### Analysis Batch: 349130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155030-1 - RA	TB-LW-090816	Total/NA	Water	8260B	
MB 440-349130/4	Method Blank	Total/NA	Water	8260B	
LCS 440-349130/5	Lab Control Sample	Total/NA	Water	8260B	
720-73884-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
720-73884-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

## HPLC/IC

### Analysis Batch: 351512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155030-4	PW-6B-GW-090816	Total/NA	Water	314.0 LL	
440-155030-9	PW-5B-GW-090816	Total/NA	Water	314.0 LL	
440-155030-10	PW-5A-GW-090816	Total/NA	Water	314.0 LL	
440-155030-11	EB-LW-090816	Total/NA	Water	314.0 LL	
MB 440-351512/107	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-351512/108	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-351512/88	Lab Control Sample	Total/NA	Water	314.0 LL	

### Analysis Batch: 352030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155030-2	PW-6D-GW-090816	Total/NA	Water	314.0 LL	
440-155030-3	PW-6C-GW-090816	Total/NA	Water	314.0 LL	
440-155030-5	PW-5E-GW-090816	Total/NA	Water	314.0 LL	
440-155030-6	PW-5D-GW-090816	Total/NA	Water	314.0 LL	
440-155030-8	PW-5C-GW-090816	Total/NA	Water	314.0 LL	
MB 440-352030/3	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-352030/2	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-352030/5	Lab Control Sample	Total/NA	Water	314.0 LL	
440-155061-D-4 MS	Matrix Spike	Total/NA	Water	314.0 LL	
440-155061-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	

TestAmerica Irvine

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

## HPLC/IC (Continued)

Analysis Batch: 352317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155030-7	PW-5D-GW-090816-D	Total/NA	Water	314.0 LL	5
MB 440-352317/3	Method Blank	Total/NA	Water	314.0 LL	6
LCS 440-352317/2	Lab Control Sample	Total/NA	Water	314.0 LL	7
MRL 440-352317/5	Lab Control Sample	Total/NA	Water	314.0 LL	8
440-156050-A-11 MS	Matrix Spike	Total/NA	Water	314.0 LL	9
440-156050-A-11 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	10

## Definitions/Glossary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

### Glossary

#### Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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## Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155030-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.





## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155030-1

**Login Number: 155030**

**List Source: TestAmerica Irvine**

**List Number: 1**

**Creator: Soderblom, Tim**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-155061-1

Client Project/Site: RFF Rialto Treatment, 60438759

For:

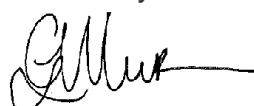
AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook



Authorized for release by:

8/30/2016 3:11:06 PM

Camille Murray, Project Manager I

[camille.murray@testamericainc.com](mailto:camille.murray@testamericainc.com)

Designee for

Patty Mata, Senior Project Manager

(949)261-1022

[patty.mata@testamericainc.com](mailto:patty.mata@testamericainc.com)

### LINKS

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155061-1	TB-LW-080816	Water	08/08/16 07:00	08/09/16 19:00
440-155061-2	PW-7G-GW-080816	Water	08/08/16 09:15	08/09/16 19:00
440-155061-3	PW-7F-GW-080816	Water	08/08/16 10:00	08/09/16 19:00
440-155061-4	PW-7E-GW-080816	Water	08/08/16 10:30	08/09/16 19:00
440-155061-5	PW-7D-GW-080816	Water	08/08/16 11:15	08/09/16 19:00
440-155061-6	PW-7C-GW-080816	Water	08/08/16 11:30	08/09/16 19:00
440-155061-7	PW-7B-GW-080816	Water	08/08/16 11:55	08/09/16 19:00
440-155061-8	PW-7C-GW-080816-D	Water	08/08/16 11:40	08/09/16 19:00
440-155061-9	PW-6E-GW-080816-	Water	08/08/16 14:40	08/09/16 19:00
440-155061-10	EB-LW-080816	Water	08/08/16 15:00	08/09/16 19:00

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TestAmerica Irvine

# Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Job ID: 440-155061-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-155061-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/9/2016 7:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.8° C, 4.1° C, 4.2° C, 4.3° C and 4.9° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### HPLC/IC

Method(s) 314.0 LL: Due to the high concentration of Perchlorate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 440-351512 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: TB-LW-080816**

Date Collected: 08/08/16 07:00

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155061-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/12/16 23:50	1
Benzene	ND		0.50	0.25	ug/L			08/12/16 23:50	1
Bromobenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Bromoform	ND		1.0	0.40	ug/L			08/12/16 23:50	1
Bromomethane	ND		2.0	0.25	ug/L			08/12/16 23:50	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/12/16 23:50	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/12/16 23:50	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/12/16 23:50	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Chloroethane	ND		1.0	0.40	ug/L			08/12/16 23:50	1
Chloroform	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Chloromethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/12/16 23:50	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Dibromomethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/12/16 23:50	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/12/16 23:50	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/12/16 23:50	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/12/16 23:50	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
2-Hexanone	ND		10	2.5	ug/L			08/12/16 23:50	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/12/16 23:50	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/12/16 23:50	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/12/16 23:50	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/12/16 23:50	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/12/16 23:50	1
Naphthalene	ND		5.0	0.40	ug/L			08/12/16 23:50	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/12/16 23:50	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
o-Xylene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/12/16 23:50	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: TB-LW-080816**

**Lab Sample ID: 440-155061-1**

Date Collected: 08/08/16 07:00

Matrix: Water

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
Styrene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/12/16 23:50	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/12/16 23:50	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Toluene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/12/16 23:50	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 23:50	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 23:50	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/12/16 23:50	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/12/16 23:50	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/12/16 23:50	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 23:50	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/12/16 23:50	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/12/16 23:50	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/12/16 23:50	1
Dibromofluoromethane (Surr)	114		76 - 132		08/12/16 23:50	1
Toluene-d8 (Surr)	106		80 - 128		08/12/16 23:50	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 00:35	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	103		80 - 120		08/17/16 00:35	1			
Dibromofluoromethane (Surr)	99		76 - 132		08/17/16 00:35	1			
Toluene-d8 (Surr)	108		80 - 128		08/17/16 00:35	1			

**Client Sample ID: PW-7G-GW-080816**

**Lab Sample ID: 440-155061-2**

Date Collected: 08/08/16 09:15

Matrix: Water

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 01:49	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 01:49	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 01:49	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7G-GW-080816**

**Lab Sample ID: 440-155061-2**

**Matrix: Water**

Date Collected: 08/08/16 09:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 01:49	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 01:49	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 01:49	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 01:49	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 01:49	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 01:49	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 01:49	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 01:49	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 01:49	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 01:49	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 01:49	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 01:49	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 01:49	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 01:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 01:49	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 01:49	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 01:49	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 01:49	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 01:49	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 01:49	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7G-GW-080816**

**Lab Sample ID: 440-155061-2**

**Matrix: Water**

Date Collected: 08/08/16 09:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 01:49	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 01:49	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 01:49	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
<b>Trichloroethene</b>	<b>0.46</b>	<b>J</b>	1.0	0.25	ug/L			08/13/16 01:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 01:49	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 01:49	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 01:49	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 01:49	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 01:49	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/13/16 01:49	1
Dibromofluoromethane (Surr)	109		76 - 132		08/13/16 01:49	1
Toluene-d8 (Surr)	106		80 - 128		08/13/16 01:49	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 01:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		80 - 120					08/17/16 01:04	1
Dibromofluoromethane (Surr)	95		76 - 132					08/17/16 01:04	1
Toluene-d8 (Surr)	110		80 - 128					08/17/16 01:04	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	11		3.0	0.50	ug/L			08/25/16 23:46	1

**Client Sample ID: PW-7F-GW-080816**

**Lab Sample ID: 440-155061-3**

**Matrix: Water**

Date Collected: 08/08/16 10:00

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 02:18	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 02:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 02:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 02:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 02:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 02:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7F-GW-080816**

**Lab Sample ID: 440-155061-3**

**Matrix: Water**

Date Collected: 08/08/16 10:00

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 02:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 02:18	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 02:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 02:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 02:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 02:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 02:18	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 02:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 02:18	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 02:18	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 02:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 02:18	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 02:18	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 02:18	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 02:18	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 02:18	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 02:18	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 02:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7F-GW-080816**

**Lab Sample ID: 440-155061-3**

**Matrix: Water**

Date Collected: 08/08/16 10:00

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 02:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 02:18	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 02:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
<b>Trichloroethene</b>	<b>3.5</b>		1.0	0.25	ug/L			08/13/16 02:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 02:18	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 02:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:18	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 02:18	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 02:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/13/16 02:18	1
Dibromofluoromethane (Surr)	109		76 - 132					08/13/16 02:18	1
Toluene-d8 (Surr)	106		80 - 128					08/13/16 02:18	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 01:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	105		80 - 120					08/17/16 01:34	1
Dibromofluoromethane (Surr)	98		76 - 132					08/17/16 01:34	1
Toluene-d8 (Surr)	112		80 - 128					08/17/16 01:34	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	59		3.0	0.50	ug/L			08/26/16 00:03	1

**Client Sample ID: PW-7E-GW-080816**

**Lab Sample ID: 440-155061-4**

**Matrix: Water**

Date Collected: 08/08/16 10:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/12/16 22:21	1
Benzene	ND		0.50	0.25	ug/L			08/12/16 22:21	1
Bromobenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Bromoform	ND		1.0	0.40	ug/L			08/12/16 22:21	1
Bromomethane	ND		2.0	0.25	ug/L			08/12/16 22:21	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/12/16 22:21	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/12/16 22:21	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/12/16 22:21	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7E-GW-080816**

**Lab Sample ID: 440-155061-4**

**Matrix: Water**

Date Collected: 08/08/16 10:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.40	ug/L			08/12/16 22:21	1
Chloroform	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Chloromethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/12/16 22:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Dibromomethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/12/16 22:21	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/12/16 22:21	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/12/16 22:21	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/12/16 22:21	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
2-Hexanone	ND		10	2.5	ug/L			08/12/16 22:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/12/16 22:21	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/12/16 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/12/16 22:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/12/16 22:21	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/12/16 22:21	1
Naphthalene	ND		5.0	0.40	ug/L			08/12/16 22:21	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/12/16 22:21	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
o-Xylene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
Styrene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/12/16 22:21	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/12/16 22:21	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
Toluene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/12/16 22:21	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 22:21	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 22:21	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7E-GW-080816**

**Lab Sample ID: 440-155061-4**

**Matrix: Water**

Date Collected: 08/08/16 10:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 22:21	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 22:21	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
<b>Trichloroethene</b>	<b>1.6</b>		1.0	0.25	ug/L			08/12/16 22:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/12/16 22:21	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/12/16 22:21	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 22:21	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/12/16 22:21	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/12/16 22:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/12/16 22:21	1
Dibromofluoromethane (Surr)	110		76 - 132					08/12/16 22:21	1
Toluene-d8 (Surr)	106		80 - 128					08/12/16 22:21	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 02:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		80 - 120					08/17/16 02:03	1
Dibromofluoromethane (Surr)	99		76 - 132					08/17/16 02:03	1
Toluene-d8 (Surr)	110		80 - 128					08/17/16 02:03	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	35	F1	3.0	0.50	ug/L			08/26/16 10:42	1

**Client Sample ID: PW-7D-GW-080816**

**Lab Sample ID: 440-155061-5**

**Matrix: Water**

Date Collected: 08/08/16 11:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 02:48	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 02:48	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 02:48	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 02:48	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 02:48	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 02:48	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 02:48	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 02:48	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7D-GW-080816**

**Lab Sample ID: 440-155061-5**

**Matrix: Water**

Date Collected: 08/08/16 11:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 02:48	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 02:48	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 02:48	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 02:48	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 02:48	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 02:48	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 02:48	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 02:48	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 02:48	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 02:48	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 02:48	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 02:48	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 02:48	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 02:48	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 02:48	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 02:48	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 02:48	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 02:48	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7D-GW-080816**

**Lab Sample ID: 440-155061-5**

Matrix: Water

Date Collected: 08/08/16 11:15

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/13/16 02:48	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 02:48	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 02:48	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 02:48	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 02:48	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 02:48	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120					08/13/16 02:48	1
Dibromofluoromethane (Surr)	110		76 - 132					08/13/16 02:48	1
Toluene-d8 (Surr)	107		80 - 128					08/13/16 02:48	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 02:33	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		80 - 120					08/17/16 02:33	1
Dibromofluoromethane (Surr)	100		76 - 132					08/17/16 02:33	1
Toluene-d8 (Surr)	111		80 - 128					08/17/16 02:33	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/26/16 00:37	1

**Client Sample ID: PW-7C-GW-080816**

**Lab Sample ID: 440-155061-6**

Matrix: Water

Date Collected: 08/08/16 11:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 03:18	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 03:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 03:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 03:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 03:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 03:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 03:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 03:18	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 03:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7C-GW-080816**

**Lab Sample ID: 440-155061-6**

**Matrix: Water**

Date Collected: 08/08/16 11:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 03:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 03:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 03:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 03:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 03:18	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 03:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 03:18	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 03:18	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 03:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 03:18	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 03:18	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 03:18	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 03:18	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 03:18	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 03:18	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 03:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 03:18	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 03:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1
<b>Trichloroethene</b>	<b>0.66 J</b>		1.0	0.25	ug/L			08/13/16 03:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 03:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7C-GW-080816**

**Lab Sample ID: 440-155061-6**

**Matrix: Water**

Date Collected: 08/08/16 11:30

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 03:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 03:18	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 03:18	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 03:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/13/16 03:18	1
Dibromofluoromethane (Surr)	110		76 - 132					08/13/16 03:18	1
Toluene-d8 (Surr)	107		80 - 128					08/13/16 03:18	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 03:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104		80 - 120					08/17/16 03:02	1
Dibromofluoromethane (Surr)	101		76 - 132					08/17/16 03:02	1
Toluene-d8 (Surr)	111		80 - 128					08/17/16 03:02	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	6.2		3.0	0.50	ug/L			08/26/16 00:54	1

**Client Sample ID: PW-7B-GW-080816**

**Lab Sample ID: 440-155061-7**

**Matrix: Water**

Date Collected: 08/08/16 11:55

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 03:48	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 03:48	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 03:48	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 03:48	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 03:48	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 03:48	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 03:48	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 03:48	1
<b>Chloroform</b>	<b>0.26 J</b>		1.0	0.25	ug/L			08/13/16 03:48	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 03:48	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 03:48	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 03:48	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 03:48	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 03:48	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 03:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 03:48	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7B-GW-080816**

**Lab Sample ID: 440-155061-7**

**Matrix: Water**

Date Collected: 08/08/16 11:55

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Dibromomethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/13/16 03:48		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/13/16 03:48		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/13/16 03:48		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/13/16 03:48		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
2-Hexanone	ND		10	2.5	ug/L		08/13/16 03:48		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Isopropyl Ether (DIPÉ)	ND		2.0	0.25	ug/L		08/13/16 03:48		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/13/16 03:48		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/13/16 03:48		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/13/16 03:48		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/13/16 03:48		1
Naphthalene	ND		5.0	0.40	ug/L		08/13/16 03:48		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/13/16 03:48		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
o-Xylene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
Styrene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/13/16 03:48		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/13/16 03:48		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Toluene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/13/16 03:48		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/13/16 03:48		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/13/16 03:48		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Trichloroethene	ND		1.0	0.25	ug/L		08/13/16 03:48		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/13/16 03:48		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/13/16 03:48		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/13/16 03:48		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/13/16 03:48		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7B-GW-080816**

**Lab Sample ID: 440-155061-7**

**Matrix: Water**

Date Collected: 08/08/16 11:55

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 03:48	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 03:48	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	100		80 - 120				Prepared	08/13/16 03:48	1
Dibromofluoromethane (Surr)	111		76 - 132					08/13/16 03:48	1
Toluene-d8 (Surr)	106		80 - 128					08/13/16 03:48	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 03:32	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	100		80 - 120				Prepared	08/17/16 03:32	1
Dibromofluoromethane (Surr)	98		76 - 132					08/17/16 03:32	1
Toluene-d8 (Surr)	111		80 - 128					08/17/16 03:32	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	2.3	J	3.0	0.50	ug/L			08/26/16 02:01	1

**Client Sample ID: PW-7C-GW-080816-D**

**Lab Sample ID: 440-155061-8**

**Matrix: Water**

Date Collected: 08/08/16 11:40

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 04:17	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 04:17	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 04:17	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 04:17	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 04:17	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 04:17	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 04:17	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 04:17	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 04:17	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7C-GW-080816-D**

**Lab Sample ID: 440-155061-8**

**Matrix: Water**

Date Collected: 08/08/16 11:40

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 04:17	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 04:17	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 04:17	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 04:17	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 04:17	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 04:17	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 04:17	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 04:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 04:17	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 04:17	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 04:17	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 04:17	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 04:17	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 04:17	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 04:17	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 04:17	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 04:17	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
<b>Trichloroethene</b>	<b>0.73 J</b>		1.0	0.25	ug/L			08/13/16 04:17	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 04:17	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 04:17	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:17	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 04:17	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 04:17	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-7C-GW-080816-D**

Date Collected: 08/08/16 11:40

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155061-8**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		08/13/16 04:17	1
Dibromofluoromethane (Surr)	111		76 - 132		08/13/16 04:17	1
Toluene-d8 (Surr)	107		80 - 128		08/13/16 04:17	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 04:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120		08/17/16 04:01	1
Dibromofluoromethane (Surr)	100		76 - 132		08/17/16 04:01	1
Toluene-d8 (Surr)	111		80 - 128		08/17/16 04:01	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	6.4		3.0	0.50	ug/L			08/26/16 02:18	1

**Client Sample ID: PW-6E-GW-080816-**

Date Collected: 08/08/16 14:40

Date Received: 08/09/16 19:00

**Lab Sample ID: 440-155061-9**

Matrix: Water

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 04:47	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 04:47	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 04:47	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 04:47	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 04:47	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 04:47	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 04:47	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 04:47	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 04:47	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 04:47	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-6E-GW-080816-**

**Lab Sample ID: 440-155061-9**

**Matrix: Water**

Date Collected: 08/08/16 14:40

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 04:47	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 04:47	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 04:47	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 04:47	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 04:47	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 04:47	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 04:47	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 04:47	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 04:47	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 04:47	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 04:47	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 04:47	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 04:47	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 04:47	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 04:47	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 04:47	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Trichloroethene	ND		1.0	0.25	ug/L			08/13/16 04:47	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 04:47	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 04:47	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 04:47	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 04:47	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		08/13/16 04:47	1
Dibromofluoromethane (Surr)	111		76 - 132		08/13/16 04:47	1
Toluene-d8 (Surr)	108		80 - 128		08/13/16 04:47	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: PW-6E-GW-080816-**

**Lab Sample ID: 440-155061-9**

**Matrix: Water**

Date Collected: 08/08/16 14:40

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 04:31	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
103			80 - 120					08/17/16 04:31	1
Dibromofluoromethane (Surr)	100		76 - 132					08/17/16 04:31	1
Toluene-d8 (Surr)	109		80 - 128					08/17/16 04:31	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	2.3	J	3.0	0.50	ug/L			08/26/16 02:35	1

**Client Sample ID: EB-LW-080816**

**Lab Sample ID: 440-155061-10**

**Matrix: Water**

Date Collected: 08/08/16 15:00

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/13/16 00:20	1
Benzene	ND		0.50	0.25	ug/L			08/13/16 00:20	1
Bromobenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Bromoform	ND		1.0	0.40	ug/L			08/13/16 00:20	1
Bromomethane	ND		2.0	0.25	ug/L			08/13/16 00:20	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/13/16 00:20	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/13/16 00:20	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/13/16 00:20	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Chloroethane	ND		1.0	0.40	ug/L			08/13/16 00:20	1
Chloroform	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Chloromethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/13/16 00:20	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Dibromomethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/13/16 00:20	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/13/16 00:20	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/13/16 00:20	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: EB-LW-080816**

**Lab Sample ID: 440-155061-10**

**Matrix: Water**

Date Collected: 08/08/16 15:00

Date Received: 08/09/16 19:00

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/13/16 00:20	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
2-Hexanone	ND		10	2.5	ug/L			08/13/16 00:20	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/13/16 00:20	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/13/16 00:20	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/13/16 00:20	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/13/16 00:20	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/13/16 00:20	1
Naphthalene	ND		5.0	0.40	ug/L			08/13/16 00:20	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/13/16 00:20	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
o-Xylene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
Styrene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/13/16 00:20	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/13/16 00:20	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Toluene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/13/16 00:20	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 00:20	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/13/16 00:20	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Trichloroethene	ND		1.0	0.25	ug/L			08/13/16 00:20	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/13/16 00:20	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/13/16 00:20	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/13/16 00:20	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/13/16 00:20	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/13/16 00:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98			80 - 120				08/13/16 00:20	1
Dibromofluoromethane (Surr)	111			76 - 132				08/13/16 00:20	1
Toluene-d8 (Surr)	106			80 - 128				08/13/16 00:20	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 05:00	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: EB-LW-080816**

**Lab Sample ID: 440-155061-10**

**Matrix: Water**

Date Collected: 08/08/16 15:00

Date Received: 08/09/16 19:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		80 - 120		08/17/16 05:00	1
Dibromofluoromethane (Surr)	101		76 - 132		08/17/16 05:00	1
Toluene-d8 (Surr)	109		80 - 128		08/17/16 05:00	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L	D		08/26/16 02:52	1

## Method Summary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# Lab Chronicle

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

**Client Sample ID: TB-LW-080816**

**Lab Sample ID: 440-155061-1**

**Matrix: Water**

**Date Collected: 08/08/16 07:00**

**Date Received: 08/09/16 19:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/12/16 23:50	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 00:35	WC	TAL IRV

**Client Sample ID: PW-7G-GW-080816**

**Lab Sample ID: 440-155061-2**

**Matrix: Water**

**Date Collected: 08/08/16 09:15**

**Date Received: 08/09/16 19:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 01:49	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 01:04	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/25/16 23:46	TLN	TAL IRV

**Client Sample ID: PW-7F-GW-080816**

**Lab Sample ID: 440-155061-3**

**Matrix: Water**

**Date Collected: 08/08/16 10:00**

**Date Received: 08/09/16 19:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 02:18	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 01:34	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 00:03	TLN	TAL IRV

**Client Sample ID: PW-7E-GW-080816**

**Lab Sample ID: 440-155061-4**

**Matrix: Water**

**Date Collected: 08/08/16 10:30**

**Date Received: 08/09/16 19:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/12/16 22:21	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 02:03	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			352030	08/26/16 10:42	CTH	TAL IRV

**Client Sample ID: PW-7D-GW-080816**

**Lab Sample ID: 440-155061-5**

**Matrix: Water**

**Date Collected: 08/08/16 11:15**

**Date Received: 08/09/16 19:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 02:48	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 02:33	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 00:37	TLN	TAL IRV

TestAmerica Irvine

# Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## **Client Sample ID: PW-7C-GW-080816**

**Date Collected:** 08/08/16 11:30  
**Date Received:** 08/09/16 19:00

## **Lab Sample ID: 440-155061-6**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 03:18	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 03:02	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 00:54	TLN	TAL IRV

## **Client Sample ID: PW-7B-GW-080816**

**Date Collected:** 08/08/16 11:55  
**Date Received:** 08/09/16 19:00

## **Lab Sample ID: 440-155061-7**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 03:48	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 03:32	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 02:01	TLN	TAL IRV

## **Client Sample ID: PW-7C-GW-080816-D**

**Date Collected:** 08/08/16 11:40  
**Date Received:** 08/09/16 19:00

## **Lab Sample ID: 440-155061-8**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 04:17	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 04:01	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 02:18	TLN	TAL IRV

## **Client Sample ID: PW-6E-GW-080816-**

**Date Collected:** 08/08/16 14:40  
**Date Received:** 08/09/16 19:00

## **Lab Sample ID: 440-155061-9**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 04:47	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 04:31	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 02:35	TLN	TAL IRV

## **Client Sample ID: EB-LW-080816**

**Date Collected:** 08/08/16 15:00  
**Date Received:** 08/09/16 19:00

## **Lab Sample ID: 440-155061-10**

**Matrix:** Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	348897	08/13/16 00:20	LMB	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	349621	08/17/16 05:00	WC	TAL IRV
Total/NA	Analysis	314.0 LL		1			351512	08/26/16 02:52	TLN	TAL IRV

### **Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-348897/3**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/12/16 20:51	1
Benzene	ND		0.50	0.25	ug/L			08/12/16 20:51	1
Bromobenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Bromoform	ND		1.0	0.40	ug/L			08/12/16 20:51	1
Bromomethane	ND		2.0	0.25	ug/L			08/12/16 20:51	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/12/16 20:51	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/12/16 20:51	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/12/16 20:51	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Chloroethane	ND		1.0	0.40	ug/L			08/12/16 20:51	1
Chloroform	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Chloromethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/12/16 20:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Dibromomethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/12/16 20:51	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/12/16 20:51	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/12/16 20:51	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/12/16 20:51	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
2-Hexanone	ND		10	2.5	ug/L			08/12/16 20:51	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/12/16 20:51	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/12/16 20:51	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/12/16 20:51	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/12/16 20:51	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/12/16 20:51	1
Naphthalene	ND		5.0	0.40	ug/L			08/12/16 20:51	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/12/16 20:51	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
o-Xylene	ND		1.0	0.25	ug/L			08/12/16 20:51	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-348897/3**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
Styrene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/12/16 20:51	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/12/16 20:51	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Toluene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/12/16 20:51	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 20:51	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/12/16 20:51	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/12/16 20:51	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/12/16 20:51	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/12/16 20:51	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/12/16 20:51	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/12/16 20:51	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/12/16 20:51	1

### MB MB

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	98		80 - 120		08/12/16 20:51	1
Dibromofluoromethane (Surr)	112		76 - 132		08/12/16 20:51	1
Toluene-d8 (Surr)	107		80 - 128		08/12/16 20:51	1

**Lab Sample ID: LCS 440-348897/4**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	23.3		ug/L		93	10 - 150
Benzene	25.0	23.4		ug/L		94	68 - 130
Bromobenzene	25.0	25.0		ug/L		100	70 - 130
Bromochloromethane	25.0	28.8		ug/L		115	70 - 130
Bromodichloromethane	25.0	26.6		ug/L		106	70 - 132
Bromoform	25.0	27.5		ug/L		110	60 - 148
Bromomethane	25.0	28.1		ug/L		113	64 - 139
2-Butanone (MEK)	25.0	23.7		ug/L		95	44 - 150
Carbon disulfide	25.0	23.6		ug/L		94	52 - 136
Carbon tetrachloride	25.0	25.1		ug/L		101	60 - 150
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130
Chloroethane	25.0	26.0		ug/L		104	64 - 135
Chloroform	25.0	26.3		ug/L		105	70 - 130

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-348897/4**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	22.4		ug/L		89	47 - 140		
2-Chlorotoluene	25.0	22.9		ug/L		92	70 - 130		
4-Chlorotoluene	25.0	22.9		ug/L		91	70 - 130		
cis-1,2-Dichloroethene	25.0	27.2		ug/L		109	70 - 133		
cis-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 133		
Dibromochloromethane	25.0	26.4		ug/L		106	69 - 145		
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	52 - 140		
1,2-Dibromoethane (EDB)	25.0	27.1		ug/L		108	70 - 130		
Dibromomethane	25.0	28.7		ug/L		115	70 - 130		
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130		
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130		
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130		
Dichlorodifluoromethane	25.0	21.4		ug/L		86	29 - 150		
1,1-Dichloroethane	25.0	25.8		ug/L		103	64 - 130		
1,2-Dichloroethene	25.0	27.4		ug/L		109	57 - 138		
1,1-Dichloroethene	25.0	24.7		ug/L		99	70 - 130		
1,2-Dichloropropane	25.0	27.2		ug/L		109	67 - 130		
1,3-Dichloropropane	25.0	25.4		ug/L		101	70 - 130		
2,2-Dichloropropane	25.0	26.1		ug/L		105	68 - 141		
1,1-Dichloropropene	25.0	24.6		ug/L		98	70 - 130		
Ethylbenzene	25.0	23.5		ug/L		94	70 - 130		
Ethyl-t-butyl ether (ETBE)	25.0	26.7		ug/L		107	60 - 136		
Hexachlorobutadiene	25.0	23.5		ug/L		94	10 - 150		
2-Hexanone	25.0	22.3		ug/L		89	10 - 150		
Isopropylbenzene	25.0	23.8		ug/L		95	70 - 136		
Isopropyl Ether (DIPE)	25.0	26.0		ug/L		104	58 - 139		
Methylene Chloride	25.0	27.0		ug/L		108	52 - 130		
4-Methyl-2-pentanone (MIBK)	25.0	24.0		ug/L		96	59 - 149		
Methyl-t-Butyl Ether (MTBE)	25.0	28.4		ug/L		114	63 - 131		
m,p-Xylene	25.0	24.0		ug/L		96	70 - 130		
Naphthalene	25.0	23.8		ug/L		95	60 - 140		
n-Butylbenzene	25.0	21.7		ug/L		87	65 - 150		
N-Propylbenzene	25.0	21.4		ug/L		86	67 - 139		
o-Xylene	25.0	24.6		ug/L		98	70 - 130		
p-Isopropyltoluene	25.0	23.4		ug/L		93	70 - 132		
sec-Butylbenzene	25.0	22.5		ug/L		90	70 - 138		
Styrene	25.0	24.8		ug/L		99	70 - 134		
Tert-amyl-methyl ether (TAME)	25.0	26.5		ug/L		106	57 - 139		
tert-Butyl alcohol (TBA)	250	262		ug/L		105	70 - 130		
tert-Butylbenzene	25.0	23.3		ug/L		93	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	26.0		ug/L		104	60 - 141		
1,1,2,2-Tetrachloroethane	25.0	23.6		ug/L		94	63 - 130		
Tetrachloroethene	25.0	23.3		ug/L		93	70 - 130		
Toluene	25.0	22.8		ug/L		91	70 - 130		
trans-1,2-Dichloroethene	25.0	28.2		ug/L		113	70 - 130		
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 132		
1,2,3-Trichlorobenzene	25.0	24.8		ug/L		99	60 - 140		
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	60 - 140		

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-348897/4**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
1,1,1-Trichloroethane	25.0	25.5		ug/L		102		70 - 130	
1,1,2-Trichloroethane	25.0	25.3		ug/L		101		70 - 130	
Trichloroethene	25.0	25.7		ug/L		103		70 - 130	
Trichlorofluoromethane	25.0	28.5		ug/L		114		60 - 150	
1,2,3-Trichloropropane	25.0	24.3		ug/L		97		63 - 130	
1,2,4-Trimethylbenzene	25.0	22.9		ug/L		92		70 - 135	
1,3,5-Trimethylbenzene	25.0	23.2		ug/L		93		70 - 136	
Vinyl chloride	25.0	26.4		ug/L		106		59 - 133	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	109		76 - 132
Toluene-d8 (Surr)	101		80 - 128

**Lab Sample ID: 440-155061-4 MS**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: PW-7E-GW-080816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	25.1		ug/L		100	10 - 150
Benzene	ND		25.0	23.8		ug/L		95	66 - 130
Bromobenzene	ND		25.0	24.5		ug/L		98	70 - 130
Bromochloromethane	ND		25.0	28.4		ug/L		114	70 - 130
Bromodichloromethane	ND		25.0	26.5		ug/L		106	70 - 138
Bromoform	ND		25.0	28.0		ug/L		112	59 - 150
Bromomethane	ND		25.0	27.3		ug/L		109	62 - 131
2-Butanone (MEK)	ND		25.0	23.6		ug/L		94	48 - 140
Carbon disulfide	ND		25.0	24.6		ug/L		99	49 - 140
Carbon tetrachloride	ND		25.0	25.7		ug/L		103	60 - 150
Chlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130
Chloroethane	ND		25.0	26.4		ug/L		105	68 - 130
Chloroform	ND		25.0	26.1		ug/L		104	70 - 130
Chloromethane	ND		25.0	23.4		ug/L		93	39 - 144
2-Chlorotoluene	ND		25.0	23.0		ug/L		92	70 - 130
4-Chlorotoluene	ND		25.0	23.0		ug/L		92	70 - 130
cis-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	70 - 130
cis-1,3-Dichloropropene	ND		25.0	26.3		ug/L		105	70 - 133
Dibromochloromethane	ND		25.0	26.2		ug/L		105	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	24.2		ug/L		97	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	27.3		ug/L		109	70 - 131
Dibromomethane	ND		25.0	28.3		ug/L		113	70 - 130
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L		101	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		103	70 - 130
Dichlorodifluoromethane	ND		25.0	21.2		ug/L		85	25 - 142
1,1-Dichloroethane	ND		25.0	25.8		ug/L		103	65 - 130
1,2-Dichloroethane	ND		25.0	27.2		ug/L		109	56 - 146
1,1-Dichloroethene	ND		25.0	25.1		ug/L		101	70 - 130

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155061-4 MS**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: PW-7E-GW-080816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dichloropropane	ND		25.0	26.8		ug/L		107	69 - 130		
1,3-Dichloropropane	ND		25.0	25.4		ug/L		102	70 - 130		
2,2-Dichloropropane	ND		25.0	28.3		ug/L		113	69 - 138		
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	64 - 130		
Ethylbenzene	ND		25.0	23.5		ug/L		94	70 - 130		
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.3		ug/L		105	70 - 130		
Hexachlorobutadiene	ND		25.0	24.0		ug/L		96	10 - 150		
2-Hexanone	ND		25.0	23.5		ug/L		94	10 - 150		
Isopropylbenzene	ND		25.0	24.2		ug/L		97	70 - 132		
Isopropyl Ether (DIPE)	ND		25.0	25.6		ug/L		103	64 - 138		
Methylene Chloride	ND		25.0	26.3		ug/L		105	52 - 130		
4-Methyl-2-pentanone (MIBK)	ND		25.0	25.0		ug/L		100	52 - 150		
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.7		ug/L		111	70 - 130		
m,p-Xylene	ND		25.0	24.5		ug/L		98	70 - 133		
Naphthalene	ND		25.0	24.6		ug/L		98	60 - 140		
n-Butylbenzene	ND		25.0	22.8		ug/L		91	61 - 149		
N-Propylbenzene	ND		25.0	21.9		ug/L		87	66 - 135		
o-Xylene	ND		25.0	24.6		ug/L		99	70 - 133		
p-Isopropyltoluene	ND		25.0	24.5		ug/L		98	70 - 130		
sec-Butylbenzene	ND		25.0	23.0		ug/L		92	67 - 134		
Styrene	ND		25.0	24.4		ug/L		98	29 - 150		
Tert-amyl-methyl ether (TAME)	ND		25.0	26.4		ug/L		106	68 - 133		
tert-Butyl alcohol (TBA)	ND		250	262		ug/L		105	70 - 130		
tert-Butylbenzene	ND		25.0	23.8		ug/L		95	70 - 130		
1,1,1,2-Tetrachloroethane	ND		25.0	25.5		ug/L		102	60 - 149		
1,1,2,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	63 - 130		
Tetrachloroethene	ND		25.0	23.7		ug/L		95	70 - 137		
Toluene	ND		25.0	23.2		ug/L		93	70 - 130		
trans-1,2-Dichloroethene	ND		25.0	28.1		ug/L		112	70 - 130		
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	70 - 138		
1,2,3-Trichlorobenzene	ND		25.0	25.3		ug/L		101	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140		
1,1,1-Trichloroethane	ND		25.0	26.0		ug/L		104	70 - 130		
1,1,2-Trichloroethane	ND		25.0	25.6		ug/L		102	70 - 130		
Trichloroethene	1.6		25.0	26.9		ug/L		101	70 - 130		
Trichlorofluoromethane	ND		25.0	29.4		ug/L		118	60 - 150		
1,2,3-Trichloropropane	ND		25.0	24.7		ug/L		99	60 - 130		
1,2,4-Trimethylbenzene	ND		25.0	23.5		ug/L		94	70 - 130		
1,3,5-Trimethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130		
Vinyl chloride	ND		25.0	27.2		ug/L		109	50 - 137		
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>								
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
4-Bromofluorobenzene (Surr)		94		80 - 120							
Dibromofluoromethane (Surr)		108		76 - 132							
Toluene-d8 (Surr)		104		80 - 128							

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155061-4 MSD**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: PW-7E-GW-080816**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Acetone	ND		25.0	23.0		ug/L	92	10 - 150	9	35	
Benzene	ND		25.0	23.6		ug/L	94	66 - 130	1	20	
Bromobenzene	ND		25.0	25.3		ug/L	101	70 - 130	3	20	
Bromochloromethane	ND		25.0	28.8		ug/L	115	70 - 130	1	25	
Bromodichloromethane	ND		25.0	26.4		ug/L	106	70 - 138	0	20	
Bromoform	ND		25.0	27.6		ug/L	110	59 - 150	2	25	
Bromomethane	ND		25.0	27.0		ug/L	108	62 - 131	1	25	
2-Butanone (MEK)	ND		25.0	23.9		ug/L	96	48 - 140	1	40	
Carbon disulfide	ND		25.0	24.3		ug/L	97	49 - 140	1	20	
Carbon tetrachloride	ND		25.0	25.3		ug/L	101	60 - 150	2	25	
Chlorobenzene	ND		25.0	25.1		ug/L	100	70 - 130	1	20	
Chloroethane	ND		25.0	26.8		ug/L	107	68 - 130	2	25	
Chloroform	ND		25.0	25.9		ug/L	104	70 - 130	1	20	
Chloromethane	ND		25.0	22.8		ug/L	91	39 - 144	3	25	
2-Chlorotoluene	ND		25.0	23.5		ug/L	94	70 - 130	2	20	
4-Chlorotoluene	ND		25.0	24.0		ug/L	96	70 - 130	4	20	
cis-1,2-Dichloroethene	ND		25.0	26.2		ug/L	105	70 - 130	3	20	
cis-1,3-Dichloropropene	ND		25.0	26.3		ug/L	105	70 - 133	0	20	
Dibromochloromethane	ND		25.0	26.6		ug/L	107	70 - 148	2	25	
1,2-Dibromo-3-Chloropropane	ND		25.0	23.0		ug/L	92	48 - 140	5	30	
1,2-Dibromoethane (EDB)	ND		25.0	27.5		ug/L	110	70 - 131	1	25	
Dibromomethane	ND		25.0	28.7		ug/L	115	70 - 130	1	25	
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L	101	70 - 130	0	20	
1,3-Dichlorobenzene	ND		25.0	24.9		ug/L	100	70 - 130	1	20	
1,4-Dichlorobenzene	ND		25.0	25.5		ug/L	102	70 - 130	0	20	
Dichlorodifluoromethane	ND		25.0	21.2		ug/L	85	25 - 142	0	30	
1,1-Dichloroethane	ND		25.0	25.7		ug/L	103	65 - 130	0	20	
1,2-Dichloroethane	ND		25.0	27.1		ug/L	108	56 - 146	0	20	
1,1-Dichloroethene	ND		25.0	25.0		ug/L	100	70 - 130	1	20	
1,2-Dichloropropane	ND		25.0	27.0		ug/L	108	69 - 130	1	20	
1,3-Dichloropropane	ND		25.0	25.8		ug/L	103	70 - 130	1	25	
2,2-Dichloropropane	ND		25.0	25.8		ug/L	103	69 - 138	9	25	
1,1-Dichloropropene	ND		25.0	25.0		ug/L	100	64 - 130	1	20	
Ethylbenzene	ND		25.0	23.6		ug/L	95	70 - 130	1	20	
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.2		ug/L	105	70 - 130	0	25	
Hexachlorobutadiene	ND		25.0	24.3		ug/L	97	10 - 150	1	20	
2-Hexanone	ND		25.0	23.1		ug/L	92	10 - 150	2	35	
Isopropylbenzene	ND		25.0	24.3		ug/L	97	70 - 132	0	20	
Isopropyl Ether (DIPE)	ND		25.0	25.5		ug/L	102	64 - 138	1	25	
Methylene Chloride	ND		25.0	26.3		ug/L	105	52 - 130	0	20	
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.1		ug/L	96	52 - 150	4	35	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.5		ug/L	110	70 - 130	1	25	
m,p-Xylene	ND		25.0	24.5		ug/L	98	70 - 133	0	25	
Naphthalene	ND		25.0	24.5		ug/L	98	60 - 140	0	30	
n-Butylbenzene	ND		25.0	22.6		ug/L	90	61 - 149	1	20	
N-Propylbenzene	ND		25.0	22.6		ug/L	91	66 - 135	3	20	
o-Xylene	ND		25.0	24.7		ug/L	99	70 - 133	0	20	
p-Isopropyltoluene	ND		25.0	24.1		ug/L	96	70 - 130	2	20	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155061-4 MSD**

**Matrix: Water**

**Analysis Batch: 348897**

**Client Sample ID: PW-7E-GW-080816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	ND		25.0	23.4		ug/L	94	67 - 134	2	20	
Styrene	ND		25.0	24.6		ug/L	99	29 - 150	1	35	
Tert-amyl-methyl ether (TAME)	ND		25.0	26.2		ug/L	105	68 - 133	1	30	
tert-Butyl alcohol (TBA)	ND		250	260		ug/L	104	70 - 130	1	25	
tert-Butylbenzene	ND		25.0	24.3		ug/L	97	70 - 130	2	20	
1,1,1,2-Tetrachloroethane	ND		25.0	25.8		ug/L	103	60 - 149	1	20	
1,1,2,2-Tetrachloroethane	ND		25.0	24.5		ug/L	98	63 - 130	0	30	
Tetrachloroethylene	ND		25.0	24.7		ug/L	99	70 - 137	4	20	
Toluene	ND		25.0	23.3		ug/L	93	70 - 130	0	20	
trans-1,2-Dichloroethylene	ND		25.0	27.8		ug/L	111	70 - 130	1	20	
trans-1,3-Dichloropropene	ND		25.0	26.3		ug/L	105	70 - 138	0	25	
1,2,3-Trichlorobenzene	ND		25.0	25.3		ug/L	101	60 - 140	0	20	
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L	102	60 - 140	0	20	
1,1,1-Trichloroethane	ND		25.0	26.0		ug/L	104	70 - 130	0	20	
1,1,2-Trichloroethane	ND		25.0	25.9		ug/L	103	70 - 130	1	25	
Trichloroethene	1.6		25.0	27.1		ug/L	102	70 - 130	1	20	
Trichlorofluoromethane	ND		25.0	29.2		ug/L	117	60 - 150	1	25	
1,2,3-Trichloropropane	ND		25.0	23.9		ug/L	96	60 - 130	3	30	
1,2,4-Trimethylbenzene	ND		25.0	23.9		ug/L	95	70 - 130	1	25	
1,3,5-Trimethylbenzene	ND		25.0	24.0		ug/L	96	70 - 130	3	20	
Vinyl chloride	ND		25.0	26.4		ug/L	106	50 - 137	3	30	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	107		76 - 132
Toluene-d8 (Surr)	102		80 - 128

**Lab Sample ID: MB 440-349621/4**

**Matrix: Water**

**Analysis Batch: 349621**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/16/16 20:09	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	105		80 - 120		08/16/16 20:09	1			
Dibromofluoromethane (Surr)	98		76 - 132		08/16/16 20:09	1			
Toluene-d8 (Surr)	109		80 - 128		08/16/16 20:09	1			

## Method: 314.0 LL - Perchlorate (IC)

**Lab Sample ID: MB 440-351512/107**

**Matrix: Water**

**Analysis Batch: 351512**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 19:31	1

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# QC Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Method: 314.0 LL - Perchlorate (IC) (Continued)

**Lab Sample ID: LCS 440-351512/108**

**Matrix: Water**

**Analysis Batch: 351512**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	25.0	22.5		ug/L	90	85 - 115	

**Lab Sample ID: MRL 440-351512/88**

**Matrix: Water**

**Analysis Batch: 351512**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec.	Limits
Perchlorate	4.00	4.04		ug/L	101	75 - 125	

**Lab Sample ID: MB 440-352030/3**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/26/16 09:44	1

**Lab Sample ID: LCS 440-352030/2**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	25.0	24.1		ug/L	97	85 - 115	

**Lab Sample ID: MRL 440-352030/5**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec.	Limits
Perchlorate	4.00	3.30		ug/L	82	75 - 125	

**Lab Sample ID: 440-155061-4 MS**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: PW-7E-GW-080816**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	35	F1	25.0	54.2	F1	ug/L	77	80 - 120	

**Lab Sample ID: 440-155061-4 MSD**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: PW-7E-GW-080816**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Perchlorate	35	F1	25.0	56.3		ug/L	85	80 - 120	4	20

TestAmerica Irvine

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## GC/MS VOA

### Analysis Batch: 348897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155061-1	TB-LW-080816	Total/NA	Water	8260B	
440-155061-2	PW-7G-GW-080816	Total/NA	Water	8260B	
440-155061-3	PW-7F-GW-080816	Total/NA	Water	8260B	
440-155061-4	PW-7E-GW-080816	Total/NA	Water	8260B	
440-155061-5	PW-7D-GW-080816	Total/NA	Water	8260B	
440-155061-6	PW-7C-GW-080816	Total/NA	Water	8260B	
440-155061-7	PW-7B-GW-080816	Total/NA	Water	8260B	
440-155061-8	PW-7C-GW-080816-D	Total/NA	Water	8260B	
440-155061-9	PW-6E-GW-080816-	Total/NA	Water	8260B	
440-155061-10	EB-LW-080816	Total/NA	Water	8260B	
MB 440-348897/3	Method Blank	Total/NA	Water	8260B	
LCS 440-348897/4	Lab Control Sample	Total/NA	Water	8260B	
440-155061-4 MS	PW-7E-GW-080816	Total/NA	Water	8260B	
440-155061-4 MSD	PW-7E-GW-080816	Total/NA	Water	8260B	

### Analysis Batch: 349621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155061-1 - RA	TB-LW-080816	Total/NA	Water	8260B	
440-155061-2 - RA	PW-7G-GW-080816	Total/NA	Water	8260B	
440-155061-3 - RA	PW-7F-GW-080816	Total/NA	Water	8260B	
440-155061-4 - RA	PW-7E-GW-080816	Total/NA	Water	8260B	
440-155061-5 - RA	PW-7D-GW-080816	Total/NA	Water	8260B	
440-155061-6 - RA	PW-7C-GW-080816	Total/NA	Water	8260B	
440-155061-7 - RA	PW-7B-GW-080816	Total/NA	Water	8260B	
440-155061-8 - RA	PW-7C-GW-080816-D	Total/NA	Water	8260B	
440-155061-9 - RA	PW-6E-GW-080816-	Total/NA	Water	8260B	
440-155061-10 - RA	EB-LW-080816	Total/NA	Water	8260B	
MB 440-349621/4	Method Blank	Total/NA	Water	8260B	

## HPLC/IC

### Analysis Batch: 351512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155061-2	PW-7G-GW-080816	Total/NA	Water	314.0 LL	
440-155061-3	PW-7F-GW-080816	Total/NA	Water	314.0 LL	
440-155061-5	PW-7D-GW-080816	Total/NA	Water	314.0 LL	
440-155061-6	PW-7C-GW-080816	Total/NA	Water	314.0 LL	
440-155061-7	PW-7B-GW-080816	Total/NA	Water	314.0 LL	
440-155061-8	PW-7C-GW-080816-D	Total/NA	Water	314.0 LL	
440-155061-9	PW-6E-GW-080816-	Total/NA	Water	314.0 LL	
440-155061-10	EB-LW-080816	Total/NA	Water	314.0 LL	
MB 440-351512/107	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-351512/108	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-351512/88	Lab Control Sample	Total/NA	Water	314.0 LL	

### Analysis Batch: 352030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155061-4	PW-7E-GW-080816	Total/NA	Water	314.0 LL	
MB 440-352030/3	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-352030/2	Lab Control Sample	Total/NA	Water	314.0 LL	

TestAmerica Irvine

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## HPLC/IC (Continued)

### Analysis Batch: 352030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 440-352030/5	Lab Control Sample	Total/NA	Water	314.0 LL	5
440-155061-4 MS	PW-7E-GW-080816	Total/NA	Water	314.0 LL	6
440-155061-4 MSD	PW-7E-GW-080816	Total/NA	Water	314.0 LL	7

# Definitions/Glossary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155061-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.

TestAmerica Irvine



## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155061-1

**Login Number: 155061**

**List Source: TestAmerica Irvine**

**List Number: 1**

**Creator: Chavez, Yonny 1**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-155254-1

Client Project/Site: RFF Rialto Treatment, 60438759

For:

AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook



Authorized for release by:

8/30/2016 11:35:41 AM

Camille Murray, Project Manager I

[camille.murray@testamericainc.com](mailto:camille.murray@testamericainc.com)

Designee for

Patty Mata, Senior Project Manager

(949)261-1022

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### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155254-1	TB-LW-100816	Water	08/10/16 07:00	08/10/16 18:10
440-155254-2	PW-8E-GW-100816	Water	08/10/16 08:45	08/10/16 18:10
440-155254-3	PW-8D-GW-100816	Water	08/10/16 09:20	08/10/16 18:10
440-155254-4	PW-8C-GW-100816	Water	08/10/16 09:45	08/10/16 18:10
440-155254-5	PW-8B-GW-100816	Water	08/10/16 10:30	08/10/16 18:10
440-155254-6	PW-8A-GW-100816	Water	08/10/16 10:45	08/10/16 18:10
440-155254-7	EB-LW-100816	Water	08/10/16 11:00	08/10/16 18:10

# Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Job ID: 440-155254-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-155254-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/10/2016 6:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.7° C, 2.9° C and 4.6° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: TB-LW-100816**

**Lab Sample ID: 440-155254-1**

**Matrix: Water**

**Date Collected: 08/10/16 07:00**

**Date Received: 08/10/16 18:10**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 02:18	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 02:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 02:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 02:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 02:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 02:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 02:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 02:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 02:18	1
Chloroform	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/17/16 02:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/17/16 02:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/17/16 02:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/17/16 02:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/17/16 02:18	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
2-Hexanone	ND		10	2.5	ug/L			08/17/16 02:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/17/16 02:18	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/17/16 02:18	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/17/16 02:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/17/16 02:18	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/17/16 02:18	1
Naphthalene	ND		5.0	0.40	ug/L			08/17/16 02:18	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/17/16 02:18	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
o-Xylene	ND		1.0	0.25	ug/L			08/17/16 02:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: TB-LW-100816**

Date Collected: 08/10/16 07:00

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
Styrene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/17/16 02:18	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/17/16 02:18	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Toluene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/17/16 02:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 02:18	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 02:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/17/16 02:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/17/16 02:18	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/17/16 02:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:18	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 02:18	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 02:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		80 - 120					08/17/16 02:18	1
Dibromofluoromethane (Surr)	98		76 - 132					08/17/16 02:18	1
Toluene-d8 (Surr)	106		80 - 128					08/17/16 02:18	1

**Client Sample ID: PW-8E-GW-100816**

Date Collected: 08/10/16 08:45

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-2**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 04:03	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 04:03	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 04:03	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 04:03	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 04:03	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 04:03	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 04:03	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:03	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 04:03	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 04:03	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8E-GW-100816**

**Lab Sample ID: 440-155254-2**

**Matrix: Water**

Date Collected: 08/10/16 08:45

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Chloromethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/17/16 04:03		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Dibromomethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/17/16 04:03		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/17/16 04:03		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/17/16 04:03		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/17/16 04:03		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
2-Hexanone	ND		10	2.5	ug/L		08/17/16 04:03		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/17/16 04:03		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/17/16 04:03		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/17/16 04:03		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/17/16 04:03		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/17/16 04:03		1
Naphthalene	ND		5.0	0.40	ug/L		08/17/16 04:03		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/17/16 04:03		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
o-Xylene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
Styrene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/17/16 04:03		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/17/16 04:03		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:03		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
Toluene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/17/16 04:03		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 04:03		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/17/16 04:03		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8E-GW-100816**

**Lab Sample ID: 440-155254-2**

**Matrix: Water**

Date Collected: 08/10/16 08:45

Date Received: 08/10/16 18:10

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 04:03	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 04:03	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Trichloroethene	ND		1.0	0.25	ug/L			08/17/16 04:03	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/17/16 04:03	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/17/16 04:03	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:03	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:03	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 04:03	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 04:03	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Sur)		100		80 - 120				08/17/16 04:03	1
Dibromofluoromethane (Sur)		98		76 - 132				08/17/16 04:03	1
Toluene-d8 (Sur)		103		80 - 128				08/17/16 04:03	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 19:32	1

**Client Sample ID: PW-8D-GW-100816**

**Lab Sample ID: 440-155254-3**

**Matrix: Water**

Date Collected: 08/10/16 09:20

Date Received: 08/10/16 18:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 04:29	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 04:29	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Bromoform	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 04:29	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 04:29	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 04:29	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 04:29	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 04:29	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:29	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 04:29	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 04:29	1
Chloroform	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Chloromethane	ND		1.0	0.25	ug/L			08/17/16 04:29	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 04:29	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 04:29	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 04:29	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/17/16 04:29	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/17/16 04:29	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/17/16 04:29	1
Dibromomethane	ND		1.0	0.25	ug/L			08/17/16 04:29	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8D-GW-100816**

**Lab Sample ID: 440-155254-3**

**Matrix: Water**

Date Collected: 08/10/16 09:20

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/17/16 04:29		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/17/16 04:29		1
1,1-Dichloroethylene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/17/16 04:29		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/17/16 04:29		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
2-Hexanone	ND		10	2.5	ug/L		08/17/16 04:29		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/17/16 04:29		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/17/16 04:29		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/17/16 04:29		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/17/16 04:29		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/17/16 04:29		1
Naphthalene	ND		5.0	0.40	ug/L		08/17/16 04:29		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/17/16 04:29		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
o-Xylene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
Styrene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/17/16 04:29		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/17/16 04:29		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Toluene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/17/16 04:29		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/17/16 04:29		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/17/16 04:29		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Trichloroethene	ND		1.0	0.25	ug/L		08/17/16 04:29		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/17/16 04:29		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/17/16 04:29		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/17/16 04:29		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/17/16 04:29		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/17/16 04:29		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Client Sample ID: PW-8D-GW-100816

Date Collected: 08/10/16 09:20

Date Received: 08/10/16 18:10

## Lab Sample ID: 440-155254-3

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		08/17/16 04:29	1
Dibromofluoromethane (Surr)	100		76 - 132		08/17/16 04:29	1
Toluene-d8 (Surr)	105		80 - 128		08/17/16 04:29	1

### Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 20:18	1

## Client Sample ID: PW-8C-GW-100816

Date Collected: 08/10/16 09:45

Date Received: 08/10/16 18:10

## Lab Sample ID: 440-155254-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 04:56	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 04:56	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 04:56	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 04:56	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 04:56	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 04:56	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 04:56	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 04:56	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 04:56	1
Chloroform	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Chloromethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/17/16 04:56	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Dibromomethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/17/16 04:56	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/17/16 04:56	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/17/16 04:56	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8C-GW-100816**

**Lab Sample ID: 440-155254-4**

**Matrix: Water**

Date Collected: 08/10/16 09:45

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/17/16 04:56	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
2-Hexanone	ND		10	2.5	ug/L			08/17/16 04:56	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/17/16 04:56	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/17/16 04:56	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/17/16 04:56	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/17/16 04:56	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/17/16 04:56	1
Naphthalene	ND		5.0	0.40	ug/L			08/17/16 04:56	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/17/16 04:56	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
o-Xylene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
Styrene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/17/16 04:56	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/17/16 04:56	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
Toluene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/17/16 04:56	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 04:56	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 04:56	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
<b>Trichloroethene</b>	<b>0.97 J</b>		1.0	0.25	ug/L			08/17/16 04:56	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/17/16 04:56	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/17/16 04:56	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 04:56	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 04:56	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 04:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101			80 - 120				08/17/16 04:56	1
Dibromofluoromethane (Surr)	100			76 - 132				08/17/16 04:56	1
Toluene-d8 (Surr)	105			80 - 128				08/17/16 04:56	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	43		3.0	0.50	ug/L			08/25/16 20:34	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8B-GW-100816**

**Lab Sample ID: 440-155254-5**

**Matrix: Water**

Date Collected: 08/10/16 10:30

Date Received: 08/10/16 18:10

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L		08/17/16 05:22		1
Benzene	ND		0.50	0.25	ug/L		08/17/16 05:22		1
Bromobenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Bromoform	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Bromomethane	ND		2.0	0.25	ug/L		08/17/16 05:22		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/17/16 05:22		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/17/16 05:22		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/17/16 05:22		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/17/16 05:22		1
Chloroethane	ND		1.0	0.40	ug/L		08/17/16 05:22		1
Chloroform	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Chloromethane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/17/16 05:22		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/17/16 05:22		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/17/16 05:22		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Dibromomethane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/17/16 05:22		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/17/16 05:22		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 05:22		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/17/16 05:22		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/17/16 05:22		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/17/16 05:22		1
2-Hexanone	ND		10	2.5	ug/L		08/17/16 05:22		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/17/16 05:22		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/17/16 05:22		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/17/16 05:22		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/17/16 05:22		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/17/16 05:22		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/17/16 05:22		1
Naphthalene	ND		5.0	0.40	ug/L		08/17/16 05:22		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/17/16 05:22		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/17/16 05:22		1
o-Xylene	ND		1.0	0.25	ug/L		08/17/16 05:22		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8B-GW-100816**

**Lab Sample ID: 440-155254-5**

**Matrix: Water**

Date Collected: 08/10/16 10:30

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/17/16 05:22	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:22	1
Styrene	ND		1.0	0.25	ug/L			08/17/16 05:22	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/17/16 05:22	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/17/16 05:22	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 05:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 05:22	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/17/16 05:22	1
Toluene	ND		1.0	0.25	ug/L			08/17/16 05:22	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/17/16 05:22	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 05:22	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 05:22	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 05:22	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 05:22	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 05:22	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 05:22	1
<b>Trichloroethylene</b>	<b>17</b>		1.0	0.25	ug/L			08/17/16 05:22	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/17/16 05:22	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/17/16 05:22	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:22	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:22	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 05:22	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 05:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101		80 - 120					08/17/16 05:22	1
Dibromofluoromethane (Surr)	99		76 - 132					08/17/16 05:22	1
Toluene-d8 (Surr)	105		80 - 128					08/17/16 05:22	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	89		3.0	0.50	ug/L			08/25/16 20:50	1

**Client Sample ID: PW-8A-GW-100816**

**Lab Sample ID: 440-155254-6**

**Matrix: Water**

Date Collected: 08/10/16 10:45

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 05:48	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 05:48	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 05:48	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 05:48	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 05:48	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 05:48	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 05:48	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8A-GW-100816**

**Lab Sample ID: 440-155254-6**

**Matrix: Water**

Date Collected: 08/10/16 10:45

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 05:48	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 05:48	1
<b>Chloroform</b>	<b>0.28</b>	<b>J</b>	1.0	0.25	ug/L			08/17/16 05:48	1
Chloromethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/17/16 05:48	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Dibromomethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/17/16 05:48	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/17/16 05:48	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/17/16 05:48	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/17/16 05:48	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
2-Hexanone	ND		10	2.5	ug/L			08/17/16 05:48	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/17/16 05:48	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/17/16 05:48	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/17/16 05:48	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/17/16 05:48	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/17/16 05:48	1
Naphthalene	ND		5.0	0.40	ug/L			08/17/16 05:48	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/17/16 05:48	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
o-Xylene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
Styrene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/17/16 05:48	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/17/16 05:48	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
Toluene	ND		1.0	0.25	ug/L			08/17/16 05:48	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: PW-8A-GW-100816**

**Lab Sample ID: 440-155254-6**

**Matrix: Water**

Date Collected: 08/10/16 10:45

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/17/16 05:48	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 05:48	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/17/16 05:48	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
<b>Trichloroethene</b>	<b>10</b>		1.0	0.25	ug/L			08/17/16 05:48	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/17/16 05:48	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/17/16 05:48	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 05:48	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 05:48	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 05:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	102		80 - 120					08/17/16 05:48	1
Dibromofluoromethane (Surr)	100		76 - 132					08/17/16 05:48	1
Toluene-d8 (Surr)	104		80 - 128					08/17/16 05:48	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	43		3.0	0.50	ug/L			08/25/16 21:05	1

**Client Sample ID: EB-LW-100816**

**Lab Sample ID: 440-155254-7**

**Matrix: Water**

Date Collected: 08/10/16 11:00

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/17/16 02:44	1
Benzene	ND		0.50	0.25	ug/L			08/17/16 02:44	1
Bromobenzene	ND		1.0	0.25	ug/L			08/17/16 02:44	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/17/16 02:44	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/17/16 02:44	1
Bromoform	ND		1.0	0.40	ug/L			08/17/16 02:44	1
Bromomethane	ND		2.0	0.25	ug/L			08/17/16 02:44	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/17/16 02:44	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/17/16 02:44	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/17/16 02:44	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/17/16 02:44	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/17/16 02:44	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/17/16 02:44	1
Chloroethane	ND		1.0	0.40	ug/L			08/17/16 02:44	1
Chloroform	ND		1.0	0.25	ug/L			08/17/16 02:44	1
Chloromethane	ND		1.0	0.25	ug/L			08/17/16 02:44	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 02:44	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/17/16 02:44	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/17/16 02:44	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/17/16 02:44	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: EB-LW-100816**

**Lab Sample ID: 440-155254-7**

Date Collected: 08/10/16 11:00

Matrix: Water

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/17/16 02:44		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Dibromomethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/17/16 02:44		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/17/16 02:44		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/17/16 02:44		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/17/16 02:44		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/17/16 02:44		1
2-Hexanone	ND		10	2.5	ug/L		08/17/16 02:44		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/17/16 02:44		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/17/16 02:44		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/17/16 02:44		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/17/16 02:44		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/17/16 02:44		1
Naphthalene	ND		5.0	0.40	ug/L		08/17/16 02:44		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/17/16 02:44		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/17/16 02:44		1
o-Xylene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/17/16 02:44		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 02:44		1
Styrene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/17/16 02:44		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/17/16 02:44		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/17/16 02:44		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Toluene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/17/16 02:44		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/17/16 02:44		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/17/16 02:44		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Trichloroethene	ND		1.0	0.25	ug/L		08/17/16 02:44		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/17/16 02:44		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/17/16 02:44		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: EB-LW-100816**

**Lab Sample ID: 440-155254-7**

Date Collected: 08/10/16 11:00

Matrix: Water

Date Received: 08/10/16 18:10

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:44	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/17/16 02:44	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/17/16 02:44	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/17/16 02:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		80 - 120		08/17/16 02:44	1
Dibromofluoromethane (Surr)	100		76 - 132		08/17/16 02:44	1
Toluene-d8 (Surr)	104		80 - 128		08/17/16 02:44	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 21:21	1

TestAmerica Irvine

## Method Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: TB-LW-100816**

Date Collected: 08/10/16 07:00

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 02:18	LMB	TAL IRV

**Client Sample ID: PW-8E-GW-100816**

Date Collected: 08/10/16 08:45

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 04:03	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 19:32	TLN	TAL IRV

**Client Sample ID: PW-8D-GW-100816**

Date Collected: 08/10/16 09:20

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 04:29	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 20:18	TLN	TAL IRV

**Client Sample ID: PW-8C-GW-100816**

Date Collected: 08/10/16 09:45

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 04:56	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 20:34	TLN	TAL IRV

**Client Sample ID: PW-8B-GW-100816**

Date Collected: 08/10/16 10:30

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 05:22	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 20:50	TLN	TAL IRV

**Client Sample ID: PW-8A-GW-100816**

Date Collected: 08/10/16 10:45

Date Received: 08/10/16 18:10

**Lab Sample ID: 440-155254-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 05:48	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 21:05	TLN	TAL IRV

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

**Client Sample ID: EB-LW-100816**

**Date Collected: 08/10/16 11:00**

**Date Received: 08/10/16 18:10**

**Lab Sample ID: 440-155254-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	349630	08/17/16 02:44	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 21:21	TLN	TAL IRV

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-349630/6**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			08/16/16 19:58	1
Benzene	ND		0.50	0.25	ug/L			08/16/16 19:58	1
Bromobenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Bromoform	ND		1.0	0.40	ug/L			08/16/16 19:58	1
Bromomethane	ND		2.0	0.25	ug/L			08/16/16 19:58	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/16/16 19:58	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/16/16 19:58	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/16/16 19:58	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/16/16 19:58	1
Chloroethane	ND		1.0	0.40	ug/L			08/16/16 19:58	1
Chloroform	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Chloromethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/16/16 19:58	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/16/16 19:58	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/16/16 19:58	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Dibromomethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/16/16 19:58	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/16/16 19:58	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/16/16 19:58	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/16/16 19:58	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/16/16 19:58	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/16/16 19:58	1
2-Hexanone	ND		10	2.5	ug/L			08/16/16 19:58	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/16/16 19:58	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/16/16 19:58	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/16/16 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/16/16 19:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/16/16 19:58	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/16/16 19:58	1
Naphthalene	ND		5.0	0.40	ug/L			08/16/16 19:58	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/16/16 19:58	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/16/16 19:58	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-349630/6**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/16/16 19:58	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/16/16 19:58	1
Styrene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/16/16 19:58	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/16/16 19:58	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/16/16 19:58	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/16/16 19:58	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/16/16 19:58	1
Tetrachloroethene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
Toluene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/16/16 19:58	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/16/16 19:58	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/16/16 19:58	1
1,1,1-Trichloroethane	ND				1.0	0.25	ug/L			08/16/16 19:58	1
1,1,2-Trichloroethane	ND				1.0	0.25	ug/L			08/16/16 19:58	1
Trichloroethene	ND				1.0	0.25	ug/L			08/16/16 19:58	1
Trichlorofluoromethane	ND				1.0	0.25	ug/L			08/16/16 19:58	1
1,2,3-Trichloropropane	ND				2.0	0.40	ug/L			08/16/16 19:58	1
1,2,4-Trimethylbenzene	ND				2.0	0.25	ug/L			08/16/16 19:58	1
1,3,5-Trimethylbenzene	ND				2.0	0.25	ug/L			08/16/16 19:58	1
Vinyl chloride	ND				0.50	0.25	ug/L			08/16/16 19:58	1
Xylenes, Total	ND				2.0	0.50	ug/L			08/16/16 19:58	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	100		80 - 120				08/16/16 19:58	1
Dibromofluoromethane (Surr)	99		76 - 132				08/16/16 19:58	1
Toluene-d8 (Surr)	105		80 - 128				08/16/16 19:58	1

**Lab Sample ID: LCS 440-349630/4**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acetone	25.0	26.4		ug/L	106	106	10 - 150
Benzene	25.0	24.1		ug/L	96	96	68 - 130
Bromobenzene	25.0	24.1		ug/L	96	96	70 - 130
Bromochloromethane	25.0	24.6		ug/L	99	99	70 - 130
Bromodichloromethane	25.0	25.0		ug/L	100	100	70 - 132
Bromoform	25.0	24.8		ug/L	99	99	60 - 148
Bromomethane	25.0	24.0		ug/L	96	96	64 - 139
2-Butanone (MEK)	25.0	23.9		ug/L	96	96	44 - 150
Carbon disulfide	25.0	24.0		ug/L	96	96	52 - 136
Carbon tetrachloride	25.0	25.5		ug/L	102	102	60 - 150
Chlorobenzene	25.0	22.7		ug/L	91	91	70 - 130
Chloroethane	25.0	25.0		ug/L	100	100	64 - 135

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-349630/4**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	25.0	24.3		ug/L	97	70 - 130	
Chloromethane	25.0	23.8		ug/L	95	47 - 140	
2-Chlorotoluene	25.0	25.1		ug/L	100	70 - 130	
4-Chlorotoluene	25.0	25.3		ug/L	101	70 - 130	
cis-1,2-Dichloroethene	25.0	24.9		ug/L	99	70 - 133	
cis-1,3-Dichloropropene	25.0	25.3		ug/L	101	70 - 133	
Dibromochloromethane	25.0	24.1		ug/L	97	69 - 145	
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L	97	52 - 140	
1,2-Dibromoethane (EDB)	25.0	23.7		ug/L	95	70 - 130	
Dibromomethane	25.0	23.4		ug/L	94	70 - 130	
1,2-Dichlorobenzene	25.0	24.1		ug/L	96	70 - 130	
1,3-Dichlorobenzene	25.0	24.3		ug/L	97	70 - 130	
1,4-Dichlorobenzene	25.0	23.8		ug/L	95	70 - 130	
Dichlorodifluoromethane	25.0	23.1		ug/L	92	29 - 150	
1,1-Dichloroethane	25.0	24.4		ug/L	98	64 - 130	
1,2-Dichloroethane	25.0	25.2		ug/L	101	57 - 138	
1,1-Dichloroethene	25.0	24.0		ug/L	96	70 - 130	
1,2-Dichloropropene	25.0	24.9		ug/L	100	67 - 130	
1,3-Dichloropropene	25.0	23.5		ug/L	94	70 - 130	
2,2-Dichloropropene	25.0	26.6		ug/L	106	68 - 141	
1,1-Dichloropropene	25.0	25.3		ug/L	101	70 - 130	
Ethylbenzene	25.0	23.8		ug/L	95	70 - 130	
Ethyl-t-butyl ether (ETBE)	25.0	25.4		ug/L	102	60 - 136	
Hexachlorobutadiene	25.0	25.1		ug/L	100	10 - 150	
2-Hexanone	25.0	25.0		ug/L	100	10 - 150	
Isopropylbenzene	25.0	24.5		ug/L	98	70 - 136	
Isopropyl Ether (DIPE)	25.0	26.8		ug/L	107	58 - 139	
Methylene Chloride	25.0	24.8		ug/L	99	52 - 130	
4-Methyl-2-pentanone (MIBK)	25.0	25.3		ug/L	101	59 - 149	
Methyl-t-Butyl Ether (MTBE)	25.0	24.2		ug/L	97	63 - 131	
m,p-Xylene	25.0	24.1		ug/L	96	70 - 130	
Naphthalene	25.0	24.7		ug/L	99	60 - 140	
n-Butylbenzene	25.0	25.7		ug/L	103	65 - 150	
N-Propylbenzene	25.0	25.6		ug/L	102	67 - 139	
o-Xylene	25.0	23.8		ug/L	95	70 - 130	
p-Isopropyltoluene	25.0	24.5		ug/L	98	70 - 132	
sec-Butylbenzene	25.0	24.8		ug/L	99	70 - 138	
Styrene	25.0	23.6		ug/L	95	70 - 134	
Tert-amyl-methyl ether (TAME)	25.0	24.8		ug/L	99	57 - 139	
tert-Butyl alcohol (TBA)	250	253		ug/L	101	70 - 130	
tert-Butylbenzene	25.0	25.2		ug/L	101	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	22.3		ug/L	89	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L	93	63 - 130	
Tetrachloroethene	25.0	23.4		ug/L	94	70 - 130	
Toluene	25.0	23.9		ug/L	95	70 - 130	
trans-1,2-Dichloroethene	25.0	24.6		ug/L	98	70 - 130	
trans-1,3-Dichloropropene	25.0	24.5		ug/L	98	70 - 132	
1,2,3-Trichlorobenzene	25.0	24.6		ug/L	98	60 - 140	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-349630/4**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	60 - 140
1,1,1-Trichloroethane	25.0	25.4		ug/L		101	70 - 130
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
Trichloroethylene	25.0	24.5		ug/L		98	70 - 130
Trichlorofluoromethane	25.0	26.5		ug/L		106	60 - 150
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	63 - 130
1,2,4-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 135
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		103	70 - 136
Vinyl chloride	25.0	25.0		ug/L		100	59 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		76 - 132
Toluene-d8 (Surr)	101		80 - 128

**Lab Sample ID: 440-155208-C-2 MS**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	25.5		ug/L		102	10 - 150
Benzene	ND		25.0	24.4		ug/L		97	66 - 130
Bromobenzene	ND		25.0	23.8		ug/L		95	70 - 130
Bromochloromethane	ND		25.0	24.5		ug/L		98	70 - 130
Bromodichloromethane	ND		25.0	24.9		ug/L		99	70 - 138
Bromoform	ND		25.0	25.7		ug/L		103	59 - 150
Bromomethane	ND		25.0	25.1		ug/L		100	62 - 131
2-Butanone (MEK)	ND		25.0	25.6		ug/L		102	48 - 140
Carbon disulfide	ND		25.0	24.6		ug/L		98	49 - 140
Carbon tetrachloride	ND		25.0	26.3		ug/L		105	60 - 150
Chlorobenzene	ND		25.0	23.9		ug/L		96	70 - 130
Chloroethane	ND		25.0	26.5		ug/L		106	68 - 130
Chloroform	0.46 J		25.0	25.3		ug/L		99	70 - 130
Chloromethane	ND		25.0	24.3		ug/L		97	39 - 144
2-Chlorotoluene	ND		25.0	25.9		ug/L		104	70 - 130
4-Chlorotoluene	ND		25.0	26.1		ug/L		104	70 - 130
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	70 - 130
cis-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	70 - 133
Dibromochloromethane	ND		25.0	24.7		ug/L		99	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	25.5		ug/L		102	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	24.1		ug/L		96	70 - 131
Dibromomethane	ND		25.0	23.7		ug/L		95	70 - 130
1,2-Dichlorobenzene	ND		25.0	24.3		ug/L		97	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	70 - 130
1,4-Dichlorobenzene	ND		25.0	24.4		ug/L		97	70 - 130
Dichlorodifluoromethane	ND		25.0	24.7		ug/L		99	25 - 142
1,1-Dichloroethane	ND		25.0	25.1		ug/L		100	65 - 130
1,2-Dichloroethane	ND		25.0	25.6		ug/L		102	56 - 146

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155208-C-2 MS**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethene	ND		25.0	24.3		ug/L		97	70 - 130
1,2-Dichloropropane	ND		25.0	24.6		ug/L		98	69 - 130
1,3-Dichloropropane	ND		25.0	24.0		ug/L		96	70 - 130
2,2-Dichloropropane	ND		25.0	29.9		ug/L		120	69 - 138
1,1-Dichloropropene	ND		25.0	26.8		ug/L		107	64 - 130
Ethylbenzene	ND		25.0	25.1		ug/L		100	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.2		ug/L		101	70 - 130
Hexachlorobutadiene	ND		25.0	24.4		ug/L		98	10 - 150
2-Hexanone	ND		25.0	26.1		ug/L		105	10 - 150
Isopropylbenzene	ND		25.0	25.3		ug/L		101	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	26.4		ug/L		106	64 - 138
Methylene Chloride	ND		25.0	24.6		ug/L		99	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.9		ug/L		108	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.7		ug/L		95	70 - 130
m,p-Xylene	ND		25.0	25.4		ug/L		101	70 - 133
Naphthalene	ND		25.0	25.0		ug/L		100	60 - 140
n-Butylbenzene	ND		25.0	26.4		ug/L		106	61 - 149
N-Propylbenzene	ND		25.0	26.2		ug/L		105	66 - 135
o-Xylene	ND		25.0	25.0		ug/L		100	70 - 133
p-Isopropyltoluene	ND		25.0	25.0		ug/L		100	70 - 130
sec-Butylbenzene	ND		25.0	25.3		ug/L		101	67 - 134
Styrene	ND		25.0	24.1		ug/L		96	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	24.3		ug/L		97	68 - 133
tert-Butyl alcohol (TBA)	ND		250	256		ug/L		102	70 - 130
tert-Butylbenzene	ND		25.0	25.6		ug/L		103	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	23.0		ug/L		92	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	24.4		ug/L		97	63 - 130
Tetrachloroethene	17		25.0	40.7		ug/L		93	70 - 137
Toluene	ND		25.0	25.3		ug/L		101	70 - 130
trans-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	70 - 130
trans-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	24.1		ug/L		96	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	25.3		ug/L		101	60 - 140
1,1,1-Trichloroethane	ND		25.0	27.1		ug/L		108	70 - 130
1,1,2-Trichloroethane	ND		25.0	24.1		ug/L		96	70 - 130
Trichloroethene	ND		25.0	25.4		ug/L		101	70 - 130
Trichlorofluoromethane	5.2		25.0	33.1		ug/L		111	60 - 150
1,2,3-Trichloropropane	ND		25.0	24.2		ug/L		97	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	25.6		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130
Vinyl chloride	ND		25.0	26.5		ug/L		106	50 - 137
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>						
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)		98		80 - 120					
Dibromofluoromethane (Surr)		98		76 - 132					
Toluene-d8 (Surr)		105		80 - 128					

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155208-C-2 MSD**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Acetone	ND		25.0	27.8		ug/L	111	10 - 150	9	35		
Benzene	ND		25.0	23.7		ug/L	95	66 - 130	3	20		
Bromobenzene	ND		25.0	23.9		ug/L	96	70 - 130	0	20		
Bromochloromethane	ND		25.0	23.9		ug/L	95	70 - 130	3	25		
Bromodichloromethane	ND		25.0	24.4		ug/L	98	70 - 138	2	20		
Bromoform	ND		25.0	25.5		ug/L	102	59 - 150	1	25		
Bromomethane	ND		25.0	24.4		ug/L	97	62 - 131	3	25		
2-Butanone (MEK)	ND		25.0	26.6		ug/L	106	48 - 140	4	40		
Carbon disulfide	ND		25.0	24.5		ug/L	98	49 - 140	0	20		
Carbon tetrachloride	ND		25.0	25.9		ug/L	103	60 - 150	2	25		
Chlorobenzene	ND		25.0	23.4		ug/L	94	70 - 130	2	20		
Chloroethane	ND		25.0	26.4		ug/L	106	68 - 130	0	25		
Chloroform	0.46	J	25.0	24.9		ug/L	98	70 - 130	1	20		
Chloromethane	ND		25.0	24.1		ug/L	96	39 - 144	1	25		
2-Chlorotoluene	ND		25.0	26.2		ug/L	105	70 - 130	1	20		
4-Chlorotoluene	ND		25.0	26.1		ug/L	104	70 - 130	0	20		
cis-1,2-Dichloroethene	ND		25.0	24.4		ug/L	98	70 - 130	2	20		
cis-1,3-Dichloropropene	ND		25.0	25.8		ug/L	103	70 - 133	0	20		
Dibromochloromethane	ND		25.0	24.0		ug/L	96	70 - 148	3	25		
1,2-Dibromo-3-Chloropropane	ND		25.0	25.9		ug/L	104	48 - 140	2	30		
1,2-Dibromoethane (EDB)	ND		25.0	24.3		ug/L	97	70 - 131	1	25		
Dibromomethane	ND		25.0	23.7		ug/L	95	70 - 130	0	25		
1,2-Dichlorobenzene	ND		25.0	24.1		ug/L	97	70 - 130	0	20		
1,3-Dichlorobenzene	ND		25.0	24.5		ug/L	98	70 - 130	0	20		
1,4-Dichlorobenzene	ND		25.0	24.5		ug/L	98	70 - 130	1	20		
Dichlorodifluoromethane	ND		25.0	24.2		ug/L	97	25 - 142	2	30		
1,1-Dichloroethane	ND		25.0	24.6		ug/L	98	65 - 130	2	20		
1,2-Dichloroethane	ND		25.0	24.9		ug/L	100	56 - 146	3	20		
1,1-Dichloroethene	ND		25.0	24.0		ug/L	96	70 - 130	1	20		
1,2-Dichloropropane	ND		25.0	24.2		ug/L	97	69 - 130	2	20		
1,3-Dichloropropane	ND		25.0	24.1		ug/L	97	70 - 130	0	25		
2,2-Dichloropropane	ND		25.0	28.2		ug/L	113	69 - 138	6	25		
1,1-Dichloropropene	ND		25.0	26.2		ug/L	105	64 - 130	2	20		
Ethylbenzene	ND		25.0	24.9		ug/L	100	70 - 130	1	20		
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.6		ug/L	98	70 - 130	2	25		
Hexachlorobutadiene	ND		25.0	23.5		ug/L	94	10 - 150	4	20		
2-Hexanone	ND		25.0	27.3		ug/L	109	10 - 150	4	35		
Isopropylbenzene	ND		25.0	25.5		ug/L	102	70 - 132	1	20		
Isopropyl Ether (DIPE)	ND		25.0	26.2		ug/L	105	64 - 138	1	25		
Methylene Chloride	ND		25.0	24.3		ug/L	97	52 - 130	1	20		
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.5		ug/L	110	52 - 150	2	35		
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.5		ug/L	94	70 - 130	1	25		
m,p-Xylene	ND		25.0	25.0		ug/L	100	70 - 133	1	25		
Naphthalene	ND		25.0	25.3		ug/L	101	60 - 140	1	30		
n-Butylbenzene	ND		25.0	26.2		ug/L	105	61 - 149	1	20		
N-Propylbenzene	ND		25.0	26.1		ug/L	105	66 - 135	0	20		
o-Xylene	ND		25.0	24.5		ug/L	98	70 - 133	2	20		
p-Isopropyltoluene	ND		25.0	25.0		ug/L	100	70 - 130	0	20		

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155208-C-2 MSD**

**Matrix: Water**

**Analysis Batch: 349630**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
sec-Butylbenzene	ND		25.0	25.6		ug/L		102	67 - 134	1	20	
Styrene	ND		25.0	23.6		ug/L		94	29 - 150	2	35	
Tert-amyl-methyl ether (TAME)	ND		25.0	23.7		ug/L		95	68 - 133	2	30	
tert-Butyl alcohol (TBA)	ND		250	248		ug/L		99	70 - 130	3	25	
tert-Butylbenzene	ND		25.0	25.1		ug/L		100	70 - 130	2	20	
1,1,1,2-Tetrachloroethane	ND		25.0	22.8		ug/L		91	60 - 149	1	20	
1,1,2,2-Tetrachloroethane	ND		25.0	24.3		ug/L		97	63 - 130	0	30	
Tetrachloroethene	17		25.0	41.3		ug/L		95	70 - 137	1	20	
Toluene	ND		25.0	25.0		ug/L		100	70 - 130	1	20	
trans-1,2-Dichloroethene	ND		25.0	25.2		ug/L		101	70 - 130	0	20	
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 138	3	25	
1,2,3-Trichlorobenzene	ND		25.0	23.8		ug/L		95	60 - 140	1	20	
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 140	0	20	
1,1,1-Trichloroethane	ND		25.0	26.7		ug/L		107	70 - 130	2	20	
1,1,2-Trichloroethane	ND		25.0	23.8		ug/L		95	70 - 130	1	25	
Trichloroethene	ND		25.0	25.0		ug/L		100	70 - 130	1	20	
Trichlorofluoromethane	5.2		25.0	32.7		ug/L		110	60 - 150	1	25	
1,2,3-Trichloropropane	ND		25.0	24.1		ug/L		96	60 - 130	0	30	
1,2,4-Trimethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130	1	25	
1,3,5-Trimethylbenzene	ND		25.0	25.6		ug/L		102	70 - 130	1	20	
Vinyl chloride	ND		25.0	26.6		ug/L		106	50 - 137	0	30	
<b>Surrogate</b>		<b>MSD</b>	<b>MSD</b>									
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>							
4-Bromofluorobenzene (Surr)		99			80 - 120							
Dibromofluoromethane (Surr)		95			76 - 132							
Toluene-d8 (Surr)		104			80 - 128							

## Method: 314.0 LL - Perchlorate (IC)

**Lab Sample ID: MB 440-351516/92**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 19:01	1

**Lab Sample ID: LCS 440-351516/93**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Perchlorate	25.0	24.4		ug/L		98	85 - 115

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## Method: 314.0 LL - Perchlorate (IC) (Continued)

**Lab Sample ID: MRL 440-351516/62**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike	MRL	MRL	Unit	D	%Rec	%Rec.
			Added	Result	Qualifier				Limits
Perchlorate	4.00			3.74		ug/L		94	75 - 125

**Lab Sample ID: 440-155254-2 MS**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: PW-8E-GW-100816**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike	MS	MS	Unit	D	%Rec	%Rec.
			Added	Result	Qualifier				Limits
Perchlorate	ND		25.0	24.9		ug/L		100	80 - 120

**Lab Sample ID: 440-155254-2 MSD**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: PW-8E-GW-100816**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
			Added	Result	Qualifier				Limits		
Perchlorate	ND		25.0	25.0		ug/L		100	80 - 120	0	20

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

## GC/MS VOA

**Analysis Batch: 349630**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155254-1	TB-LW-100816	Total/NA	Water	8260B	
440-155254-2	PW-8E-GW-100816	Total/NA	Water	8260B	
440-155254-3	PW-8D-GW-100816	Total/NA	Water	8260B	
440-155254-4	PW-8C-GW-100816	Total/NA	Water	8260B	
440-155254-5	PW-8B-GW-100816	Total/NA	Water	8260B	
440-155254-6	PW-8A-GW-100816	Total/NA	Water	8260B	
440-155254-7	EB-LW-100816	Total/NA	Water	8260B	
MB 440-349630/6	Method Blank	Total/NA	Water	8260B	
LCS 440-349630/4	Lab Control Sample	Total/NA	Water	8260B	
440-155208-C-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-155208-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

## HPLC/IC

**Analysis Batch: 351516**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155254-2	PW-8E-GW-100816	Total/NA	Water	314.0 LL	
440-155254-3	PW-8D-GW-100816	Total/NA	Water	314.0 LL	
440-155254-4	PW-8C-GW-100816	Total/NA	Water	314.0 LL	
440-155254-5	PW-8B-GW-100816	Total/NA	Water	314.0 LL	
440-155254-6	PW-8A-GW-100816	Total/NA	Water	314.0 LL	
440-155254-7	EB-LW-100816	Total/NA	Water	314.0 LL	
MB 440-351516/92	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-351516/93	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-351516/62	Lab Control Sample	Total/NA	Water	314.0 LL	
440-155254-2 MS	PW-8E-GW-100816	Total/NA	Water	314.0 LL	
440-155254-2 MSD	PW-8E-GW-100816	Total/NA	Water	314.0 LL	

## Definitions/Glossary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155254-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.



## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155254-1

**Login Number: 155254**

**List Source: TestAmerica Irvine**

**List Number: 1**

**Creator: Soderblom, Tim**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

**TestAmerica Job ID: 440-155537-1**

Client Project/Site: RFF Rialto Treatment, 60438759

**For:**

AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook

Authorized for release by:

8/30/2016 11:43:54 AM

Camille Murray, Project Manager I

[camille.murray@testamericainc.com](mailto:camille.murray@testamericainc.com)

Designee for

Patty Mata, Senior Project Manager

(949)261-1022

[patty.mata@testamericainc.com](mailto:patty.mata@testamericainc.com)

### LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155537-1	TB-LW-120816	Water	08/12/16 07:00	08/12/16 17:45
440-155537-2	IN/5W-34D25-770-GW-120816	Water	08/12/16 08:30	08/12/16 17:45
440-155537-3	IN/5W-34D35-600-GW-120816	Water	08/12/16 08:40	08/12/16 17:45
440-155537-4	EB-LW-120816	Water	08/12/16 09:00	08/12/16 17:45

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TestAmerica Irvine

# Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Job ID: 440-155537-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-155537-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/12/2016 5:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3° C and 2.5° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: TB-LW-120816**

**Lab Sample ID: 440-155537-1**

Date Collected: 08/12/16 07:00

Matrix: Water

Date Received: 08/12/16 17:45

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/18/16 23:19	1
Benzene	ND		0.50	0.25	ug/L			08/18/16 23:19	1
Bromobenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Bromoform	ND		1.0	0.40	ug/L			08/18/16 23:19	1
Bromomethane	ND		2.0	0.25	ug/L			08/18/16 23:19	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/18/16 23:19	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/18/16 23:19	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/18/16 23:19	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/18/16 23:19	1
Chloroethane	ND		1.0	0.40	ug/L			08/18/16 23:19	1
Chloroform	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Chloromethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/18/16 23:19	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Dibromomethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/18/16 23:19	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/18/16 23:19	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/18/16 23:19	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/18/16 23:19	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
2-Hexanone	ND		10	2.5	ug/L			08/18/16 23:19	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Isopropyl Ether (DIPÉ)	ND		2.0	0.25	ug/L			08/18/16 23:19	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/18/16 23:19	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/18/16 23:19	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/18/16 23:19	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/18/16 23:19	1
Naphthalene	ND		5.0	0.40	ug/L			08/18/16 23:19	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/18/16 23:19	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
o-Xylene	ND		1.0	0.25	ug/L			08/18/16 23:19	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: TB-LW-120816**

**Lab Sample ID: 440-155537-1**

Date Collected: 08/12/16 07:00

Matrix: Water

Date Received: 08/12/16 17:45

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
Styrene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/18/16 23:19	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/18/16 23:19	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Toluene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/18/16 23:19	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/18/16 23:19	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/18/16 23:19	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/18/16 23:19	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/18/16 23:19	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/18/16 23:19	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:19	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/18/16 23:19	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/18/16 23:19	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/18/16 23:19	1
Dibromofluoromethane (Surr)	97		76 - 132					08/18/16 23:19	1
Toluene-d8 (Surr)	106		80 - 128					08/18/16 23:19	1

**Client Sample ID: IN/5W-34D25-770-GW-120816**

**Lab Sample ID: 440-155537-2**

Date Collected: 08/12/16 08:30

Matrix: Water

Date Received: 08/12/16 17:45

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/19/16 02:23	1
Benzene	ND		0.50	0.25	ug/L			08/19/16 02:23	1
Bromobenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Bromoform	ND		1.0	0.40	ug/L			08/19/16 02:23	1
Bromomethane	ND		2.0	0.25	ug/L			08/19/16 02:23	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/19/16 02:23	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/19/16 02:23	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/19/16 02:23	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/19/16 02:23	1
Chloroethane	ND		1.0	0.40	ug/L			08/19/16 02:23	1

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# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: IN/5W-34D25-770-GW-120816**

**Lab Sample ID: 440-155537-2**

**Matrix: Water**

Date Collected: 08/12/16 08:30

Date Received: 08/12/16 17:45

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Chloromethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/19/16 02:23	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Dibromomethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/19/16 02:23	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/19/16 02:23	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/19/16 02:23	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/19/16 02:23	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
2-Hexanone	ND		10	2.5	ug/L			08/19/16 02:23	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/19/16 02:23	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/19/16 02:23	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/19/16 02:23	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/19/16 02:23	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/19/16 02:23	1
Naphthalene	ND		5.0	0.40	ug/L			08/19/16 02:23	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/19/16 02:23	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
o-Xylene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
Styrene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/19/16 02:23	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/19/16 02:23	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
Toluene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/19/16 02:23	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/19/16 02:23	1

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# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: IN/5W-34D25-770-GW-120816**  
**Date Collected: 08/12/16 08:30**  
**Date Received: 08/12/16 17:45**

**Lab Sample ID: 440-155537-2**  
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/19/16 02:23	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
<b>Trichloroethene</b>	<b>1.1</b>		1.0	0.25	ug/L			08/19/16 02:23	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/19/16 02:23	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/19/16 02:23	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:23	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/19/16 02:23	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/19/16 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		08/19/16 02:23	1
Dibromofluoromethane (Surr)	98		76 - 132		08/19/16 02:23	1
Toluene-d8 (Surr)	105		80 - 128		08/19/16 02:23	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>130</b>		30	5.0	ug/L			08/26/16 15:37	10

**Client Sample ID: IN/5W-34D35-600-GW-120816**

**Lab Sample ID: 440-155537-3**

**Date Collected: 08/12/16 08:40**  
**Date Received: 08/12/16 17:45**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/19/16 02:49	1
Benzene	ND		0.50	0.25	ug/L			08/19/16 02:49	1
Bromobenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Bromoform	ND		1.0	0.40	ug/L			08/19/16 02:49	1
Bromomethane	ND		2.0	0.25	ug/L			08/19/16 02:49	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/19/16 02:49	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/19/16 02:49	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/19/16 02:49	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/19/16 02:49	1
Chloroethane	ND		1.0	0.40	ug/L			08/19/16 02:49	1
Chloroform	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Chloromethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/19/16 02:49	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Dibromomethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: IN/5W-34D35-600-GW-120816**

**Lab Sample ID: 440-155537-3**

**Matrix: Water**

Date Collected: 08/12/16 08:40

Date Received: 08/12/16 17:45

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/19/16 02:49	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/19/16 02:49	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/19/16 02:49	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/19/16 02:49	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
2-Hexanone	ND		10	2.5	ug/L			08/19/16 02:49	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/19/16 02:49	1
<b>Methylene Chloride</b>	<b>0.99</b>	<b>J</b>	5.0	0.88	ug/L			08/19/16 02:49	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/19/16 02:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/19/16 02:49	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/19/16 02:49	1
Naphthalene	ND		5.0	0.40	ug/L			08/19/16 02:49	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/19/16 02:49	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
o-Xylene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
Styrene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/19/16 02:49	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/19/16 02:49	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
Toluene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/19/16 02:49	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/19/16 02:49	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/19/16 02:49	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
<b>Trichloroethene</b>	<b>4.3</b>		1.0	0.25	ug/L			08/19/16 02:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/19/16 02:49	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/19/16 02:49	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/19/16 02:49	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/19/16 02:49	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/19/16 02:49	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: IN/5W-34D35-600-GW-120816**

**Lab Sample ID: 440-155537-3**

Date Collected: 08/12/16 08:40

Matrix: Water

Date Received: 08/12/16 17:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		08/19/16 02:49	1
Dibromofluoromethane (Surr)	99		76 - 132		08/19/16 02:49	1
Toluene-d8 (Surr)	104		80 - 128		08/19/16 02:49	1

**Method: 314.0 LL - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	790		60	10	ug/L			08/26/16 15:53	20

**Client Sample ID: EB-LW-120816**

**Lab Sample ID: 440-155537-4**

Date Collected: 08/12/16 09:00

Matrix: Water

Date Received: 08/12/16 17:45

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/18/16 23:45	1
Benzene	ND		0.50	0.25	ug/L			08/18/16 23:45	1
Bromobenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Bromoform	ND		1.0	0.40	ug/L			08/18/16 23:45	1
Bromomethane	ND		2.0	0.25	ug/L			08/18/16 23:45	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/18/16 23:45	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/18/16 23:45	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/18/16 23:45	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/18/16 23:45	1
Chloroethane	ND		1.0	0.40	ug/L			08/18/16 23:45	1
Chloroform	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Chloromethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/18/16 23:45	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Dibromomethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/18/16 23:45	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/18/16 23:45	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/18/16 23:45	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: EB-LW-120816**

**Lab Sample ID: 440-155537-4**

**Matrix: Water**

Date Collected: 08/12/16 09:00

Date Received: 08/12/16 17:45

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/18/16 23:45	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
2-Hexanone	ND		10	2.5	ug/L			08/18/16 23:45	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Isopropyl Ether (Dipe)	ND		2.0	0.25	ug/L			08/18/16 23:45	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/18/16 23:45	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/18/16 23:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/18/16 23:45	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/18/16 23:45	1
Naphthalene	ND		5.0	0.40	ug/L			08/18/16 23:45	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/18/16 23:45	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
o-Xylene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
Styrene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/18/16 23:45	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/18/16 23:45	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Toluene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/18/16 23:45	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/18/16 23:45	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/18/16 23:45	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Trichloroethene	ND		1.0	0.25	ug/L			08/18/16 23:45	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/18/16 23:45	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/18/16 23:45	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/18/16 23:45	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/18/16 23:45	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/18/16 23:45	1

## Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/18/16 23:45	1
Dibromofluoromethane (Surr)	99		76 - 132		08/18/16 23:45	1
Toluene-d8 (Surr)	106		80 - 128		08/18/16 23:45	1

## Method: 314.0 LL - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 23:41	1

TestAmerica Irvine

## Method Summary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0 LL	Perchlorate (IC)	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

**Client Sample ID: TB-LW-120816**

**Lab Sample ID: 440-155537-1**

**Matrix: Water**

**Date Collected: 08/12/16 07:00**  
**Date Received: 08/12/16 17:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350264	08/18/16 23:19	LMB	TAL IRV

**Client Sample ID: IN/5W-34D25-770-GW-120816**

**Lab Sample ID: 440-155537-2**

**Matrix: Water**

**Date Collected: 08/12/16 08:30**  
**Date Received: 08/12/16 17:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350264	08/19/16 02:23	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		10			352030	08/26/16 15:37	CTH	TAL IRV

**Client Sample ID: IN/5W-34D35-600-GW-120816**

**Lab Sample ID: 440-155537-3**

**Matrix: Water**

**Date Collected: 08/12/16 08:40**  
**Date Received: 08/12/16 17:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350264	08/19/16 02:49	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		20			352030	08/26/16 15:53	CTH	TAL IRV

**Client Sample ID: EB-LW-120816**

**Lab Sample ID: 440-155537-4**

**Matrix: Water**

**Date Collected: 08/12/16 09:00**  
**Date Received: 08/12/16 17:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350264	08/18/16 23:45	LMB	TAL IRV
Total/NA	Analysis	314.0 LL		1			351516	08/25/16 23:41	TLN	TAL IRV

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-350264/4**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/18/16 19:22	1
Benzene	ND		0.50	0.25	ug/L			08/18/16 19:22	1
Bromobenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Bromoform	ND		1.0	0.40	ug/L			08/18/16 19:22	1
Bromomethane	ND		2.0	0.25	ug/L			08/18/16 19:22	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/18/16 19:22	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/18/16 19:22	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/18/16 19:22	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/18/16 19:22	1
Chloroethane	ND		1.0	0.40	ug/L			08/18/16 19:22	1
Chloroform	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Chloromethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 19:22	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/18/16 19:22	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/18/16 19:22	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Dibromomethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/18/16 19:22	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/18/16 19:22	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/18/16 19:22	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/18/16 19:22	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/18/16 19:22	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/18/16 19:22	1
2-Hexanone	ND		10	2.5	ug/L			08/18/16 19:22	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/18/16 19:22	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/18/16 19:22	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/18/16 19:22	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/18/16 19:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/18/16 19:22	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/18/16 19:22	1
Naphthalene	ND		5.0	0.40	ug/L			08/18/16 19:22	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/18/16 19:22	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/18/16 19:22	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-350264/4**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/18/16 19:22	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/18/16 19:22	1
Styrene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/18/16 19:22	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/18/16 19:22	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/18/16 19:22	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/18/16 19:22	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/18/16 19:22	1
Tetrachloroethylene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
Toluene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/18/16 19:22	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/18/16 19:22	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/18/16 19:22	1
1,1,1-Trichloroethane	ND				1.0	0.25	ug/L			08/18/16 19:22	1
1,1,2-Trichloroethane	ND				1.0	0.25	ug/L			08/18/16 19:22	1
Trichloroethylene	ND				1.0	0.25	ug/L			08/18/16 19:22	1
Trichlorofluoromethane	ND				1.0	0.25	ug/L			08/18/16 19:22	1
1,2,3-Trichloropropane	ND				2.0	0.40	ug/L			08/18/16 19:22	1
1,2,4-Trimethylbenzene	ND				2.0	0.25	ug/L			08/18/16 19:22	1
1,3,5-Trimethylbenzene	ND				2.0	0.25	ug/L			08/18/16 19:22	1
Vinyl chloride	ND				0.50	0.25	ug/L			08/18/16 19:22	1
Xylenes, Total	ND				2.0	0.50	ug/L			08/18/16 19:22	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	99		80 - 120				08/18/16 19:22	1
Dibromofluoromethane (Surr)	97		76 - 132				08/18/16 19:22	1
Toluene-d8 (Surr)	106		80 - 128				08/18/16 19:22	1

**Lab Sample ID: LCS 440-350264/5**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec
Acetone	25.0	27.0		ug/L	108	10 - 150
Benzene	25.0	24.7		ug/L	99	68 - 130
Bromobenzene	25.0	24.3		ug/L	97	70 - 130
Bromochloromethane	25.0	25.5		ug/L	102	70 - 130
Bromodichloromethane	25.0	26.2		ug/L	105	70 - 132
Bromoform	25.0	25.5		ug/L	102	60 - 148
Bromomethane	25.0	25.4		ug/L	102	64 - 139
2-Butanone (MEK)	25.0	25.1		ug/L	101	44 - 150
Carbon disulfide	25.0	24.7		ug/L	99	52 - 136
Carbon tetrachloride	25.0	26.0		ug/L	104	60 - 150
Chlorobenzene	25.0	23.4		ug/L	93	70 - 130
Chloroethane	25.0	26.8		ug/L	107	64 - 135

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350264/5**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier					
Chloroform	25.0	25.0		ug/L		100	70 - 130	
Chloromethane	25.0	25.9		ug/L		104	47 - 140	
2-Chlorotoluene	25.0	24.9		ug/L		100	70 - 130	
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	70 - 133	
cis-1,3-Dichloropropene	25.0	26.1		ug/L		104	70 - 133	
Dibromochloromethane	25.0	24.6		ug/L		98	69 - 145	
1,2-Dibromo-3-Chloropropane	25.0	25.7		ug/L		103	52 - 140	
1,2-Dibromoethane (EDB)	25.0	24.6		ug/L		98	70 - 130	
Dibromomethane	25.0	25.0		ug/L		100	70 - 130	
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	70 - 130	
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130	
1,4-Dichlorobenzene	25.0	23.9		ug/L		95	70 - 130	
Dichlorodifluoromethane	25.0	25.7		ug/L		103	29 - 150	
1,1-Dichloroethane	25.0	25.2		ug/L		101	64 - 130	
1,2-Dichloroethane	25.0	26.9		ug/L		108	57 - 138	
1,1-Dichloroethene	25.0	24.5		ug/L		98	70 - 130	
1,2-Dichloropropane	25.0	25.9		ug/L		104	67 - 130	
1,3-Dichloropropane	25.0	24.0		ug/L		96	70 - 130	
2,2-Dichloropropane	25.0	27.1		ug/L		108	68 - 141	
1,1-Dichloropropene	25.0	26.0		ug/L		104	70 - 130	
Ethylbenzene	25.0	24.2		ug/L		97	70 - 130	
Ethyl-t-butyl ether (ETBE)	25.0	26.1		ug/L		104	60 - 136	
Hexachlorobutadiene	25.0	25.3		ug/L		101	10 - 150	
2-Hexanone	25.0	26.1		ug/L		105	10 - 150	
Isopropylbenzene	25.0	24.7		ug/L		99	70 - 136	
Isopropyl Ether (DIPE)	25.0	27.8		ug/L		111	58 - 139	
Methylene Chloride	25.0	25.4		ug/L		101	52 - 130	
4-Methyl-2-pentanone (MIBK)	25.0	26.8		ug/L		107	59 - 149	
Methyl-t-Butyl Ether (MTBE)	25.0	25.5		ug/L		102	63 - 131	
m,p-Xylene	25.0	24.2		ug/L		97	70 - 130	
Naphthalene	25.0	25.1		ug/L		101	60 - 140	
n-Butylbenzene	25.0	25.3		ug/L		101	65 - 150	
N-Propylbenzene	25.0	25.2		ug/L		101	67 - 139	
o-Xylene	25.0	24.5		ug/L		98	70 - 130	
p-Isopropyltoluene	25.0	24.4		ug/L		97	70 - 132	
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 138	
Styrene	25.0	24.0		ug/L		96	70 - 134	
Tert-amyl-methyl ether (TAME)	25.0	25.8		ug/L		103	57 - 139	
tert-Butyl alcohol (TBA)	250	253		ug/L		101	70 - 130	
tert-Butylbenzene	25.0	25.0		ug/L		100	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	22.6		ug/L		90	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	63 - 130	
Tetrachloroethene	25.0	23.4		ug/L		94	70 - 130	
Toluene	25.0	24.1		ug/L		96	70 - 130	
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	70 - 130	
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	70 - 132	
1,2,3-Trichlorobenzene	25.0	25.1		ug/L		101	60 - 140	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350264/5**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
1,2,4-Trichlorobenzene	25.0	26.2		ug/L		105	60 - 140		
1,1,1-Trichloroethane	25.0	26.1		ug/L		104	70 - 130		
1,1,2-Trichloroethane	25.0	23.9		ug/L		96	70 - 130		
Trichloroethylene	25.0	25.3		ug/L		101	70 - 130		
Trichlorofluoromethane	25.0	27.7		ug/L		111	60 - 150		
1,2,3-Trichloropropane	25.0	23.9		ug/L		95	63 - 130		
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	70 - 135		
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 136		
Vinyl chloride	25.0	26.9		ug/L		108	59 - 133		
<hr/>									
Surrogate	LCS	LCS	Limits						
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	98		80 - 120						
Dibromofluoromethane (Surr)	100		76 - 132						
Toluene-d8 (Surr)	101		80 - 128						

**Lab Sample ID: LCSD 440-350264/6**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier						
Acetone	25.0	23.0		ug/L		92	10 - 150	16	30
Benzene	25.0	24.2		ug/L		97	68 - 130	2	20
Bromobenzene	25.0	23.6		ug/L		95	70 - 130	3	20
Bromochloromethane	25.0	24.6		ug/L		98	70 - 130	3	20
Bromodichloromethane	25.0	24.9		ug/L		99	70 - 132	5	20
Bromoform	25.0	24.9		ug/L		100	60 - 148	2	25
Bromomethane	25.0	24.2		ug/L		97	64 - 139	5	20
2-Butanone (MEK)	25.0	23.2		ug/L		93	44 - 150	8	35
Carbon disulfide	25.0	23.6		ug/L		94	52 - 136	5	20
Carbon tetrachloride	25.0	25.5		ug/L		102	60 - 150	2	25
Chlorobenzene	25.0	22.9		ug/L		91	70 - 130	2	20
Chloroethane	25.0	25.5		ug/L		102	64 - 135	5	20
Chloroform	25.0	24.4		ug/L		97	70 - 130	3	20
Chloromethane	25.0	24.8		ug/L		99	47 - 140	4	25
2-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130	3	20
4-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	70 - 133	2	20
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	70 - 133	1	25
Dibromochloromethane	25.0	24.4		ug/L		97	69 - 145	1	20
1,2-Dibromo-3-Chloropropane	25.0	22.5		ug/L		90	52 - 140	13	30
1,2-Dibromoethane (EDB)	25.0	24.2		ug/L		97	70 - 130	2	20
Dibromomethane	25.0	23.5		ug/L		94	70 - 130	6	20
1,2-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130	1	20
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	0	20
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	0	20
Dichlorodifluoromethane	25.0	24.7		ug/L		99	29 - 150	4	30
1,1-Dichloroethane	25.0	24.5		ug/L		98	64 - 130	3	20
1,2-Dichloroethane	25.0	25.7		ug/L		103	57 - 138	4	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 440-350264/6**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Added	Result	Qualifier			%Rec			
1,1-Dichloroethene	25.0	23.9		ug/L	95	70 - 130	3	20	
1,2-Dichloropropane	25.0	24.4		ug/L	98	67 - 130	6	20	
1,3-Dichloropropane	25.0	23.8		ug/L	95	70 - 130	1	20	
2,2-Dichloropropane	25.0	26.9		ug/L	108	68 - 141	1	25	
1,1-Dichloropropene	25.0	25.1		ug/L	101	70 - 130	4	20	
Ethylbenzene	25.0	23.9		ug/L	96	70 - 130	1	20	
Ethyl-t-butyl ether (ETBE)	25.0	25.4		ug/L	101	60 - 136	3	20	
Hexachlorobutadiene	25.0	25.0		ug/L	100	10 - 150	1	20	
2-Hexanone	25.0	25.3		ug/L	101	10 - 150	3	30	
Isopropylbenzene	25.0	24.6		ug/L	98	70 - 136	0	20	
Isopropyl Ether (DIPE)	25.0	26.7		ug/L	107	58 - 139	4	20	
Methylene Chloride	25.0	24.1		ug/L	96	52 - 130	5	20	
4-Methyl-2-pentanone (MIBK)	25.0	25.5		ug/L	102	59 - 149	5	30	
Methyl-t-Butyl Ether (MTBE)	25.0	24.7		ug/L	99	63 - 131	3	25	
m,p-Xylene	25.0	24.2		ug/L	97	70 - 130	0	20	
Naphthalene	25.0	24.2		ug/L	97	60 - 140	4	25	
n-Butylbenzene	25.0	25.3		ug/L	101	65 - 150	0	20	
N-Propylbenzene	25.0	24.7		ug/L	99	67 - 139	2	20	
o-Xylene	25.0	23.9		ug/L	96	70 - 130	2	20	
p-Isopropyltoluene	25.0	24.2		ug/L	97	70 - 132	1	20	
sec-Butylbenzene	25.0	24.0		ug/L	96	70 - 138	2	20	
Styrene	25.0	23.9		ug/L	96	70 - 134	0	20	
Tert-amyl-methyl ether (TAME)	25.0	24.9		ug/L	99	57 - 139	4	25	
tert-Butyl alcohol (TBA)	250	233		ug/L	93	70 - 130	8	20	
tert-Butylbenzene	25.0	24.4		ug/L	98	70 - 130	3	20	
1,1,1,2-Tetrachloroethane	25.0	22.6		ug/L	90	60 - 141	0	20	
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L	91	63 - 130	5	25	
Tetrachloroethene	25.0	23.6		ug/L	94	70 - 130	1	20	
Toluene	25.0	23.9		ug/L	96	70 - 130	1	20	
trans-1,2-Dichloroethene	25.0	24.8		ug/L	99	70 - 130	1	20	
trans-1,3-Dichloropropene	25.0	24.9		ug/L	99	70 - 132	1	20	
1,2,3-Trichlorobenzene	25.0	24.6		ug/L	99	60 - 140	2	20	
1,2,4-Trichlorobenzene	25.0	25.6		ug/L	102	60 - 140	2	20	
1,1,1-Trichloroethane	25.0	25.4		ug/L	102	70 - 130	2	20	
1,1,2-Trichloroethane	25.0	23.7		ug/L	95	70 - 130	1	20	
Trichloroethene	25.0	24.3		ug/L	97	70 - 130	4	20	
Trichlorofluoromethane	25.0	26.8		ug/L	107	60 - 150	3	20	
1,2,3-Trichloropropane	25.0	22.8		ug/L	91	63 - 130	5	20	
1,2,4-Trimethylbenzene	25.0	24.6		ug/L	99	70 - 135	3	20	
1,3,5-Trimethylbenzene	25.0	24.9		ug/L	100	70 - 136	1	20	
Vinyl chloride	25.0	26.1		ug/L	104	59 - 133	3	30	

*LCSD    LCSD*

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		76 - 132
Toluene-d8 (Surr)	101		80 - 128

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155498-B-1 MS**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	20.8		ug/L	83	10 - 150	
Benzene	ND		25.0	23.5		ug/L	94	66 - 130	
Bromobenzene	ND		25.0	22.8		ug/L	91	70 - 130	
Bromochloromethane	ND		25.0	24.4		ug/L	97	70 - 130	
Bromodichloromethane	ND		25.0	24.9		ug/L	100	70 - 138	
Bromoform	ND		25.0	25.3		ug/L	101	59 - 150	
Bromomethane	ND		25.0	24.2		ug/L	97	62 - 131	
2-Butanone (MEK)	ND		25.0	22.1		ug/L	88	48 - 140	
Carbon disulfide	ND		25.0	23.2		ug/L	93	49 - 140	
Carbon tetrachloride	ND		25.0	24.6		ug/L	98	60 - 150	
Chlorobenzene	ND		25.0	23.3		ug/L	93	70 - 130	
Chloroethane	ND		25.0	25.2		ug/L	101	68 - 130	
Chloroform	0.33 J		25.0	24.6		ug/L	97	70 - 130	
Chloromethane	ND		25.0	24.0		ug/L	96	39 - 144	
2-Chlorotoluene	ND		25.0	24.2		ug/L	97	70 - 130	
4-Chlorotoluene	ND		25.0	24.5		ug/L	98	70 - 130	
cis-1,2-Dichloroethene	ND		25.0	24.4		ug/L	98	70 - 130	
cis-1,3-Dichloropropene	ND		25.0	25.7		ug/L	103	70 - 133	
Dibromochloromethane	ND		25.0	24.4		ug/L	98	70 - 148	
1,2-Dibromo-3-Chloropropane	ND		25.0	22.5		ug/L	90	48 - 140	
1,2-Dibromoethane (EDB)	ND		25.0	24.0		ug/L	96	70 - 131	
Dibromomethane	ND		25.0	23.9		ug/L	96	70 - 130	
1,2-Dichlorobenzene	ND		25.0	23.5		ug/L	94	70 - 130	
1,3-Dichlorobenzene	ND		25.0	23.4		ug/L	94	70 - 130	
1,4-Dichlorobenzene	ND		25.0	23.4		ug/L	94	70 - 130	
Dichlorodifluoromethane	ND		25.0	23.9		ug/L	96	25 - 142	
1,1-Dichloroethane	ND		25.0	24.4		ug/L	98	65 - 130	
1,2-Dichloroethane	ND		25.0	25.7		ug/L	103	56 - 146	
1,1-Dichloroethene	ND		25.0	22.6		ug/L	91	70 - 130	
1,2-Dichloropropane	ND		25.0	24.6		ug/L	98	69 - 130	
1,3-Dichloropropane	ND		25.0	24.1		ug/L	96	70 - 130	
2,2-Dichloropropane	ND		25.0	25.4		ug/L	102	69 - 138	
1,1-Dichloropropene	ND		25.0	24.8		ug/L	99	64 - 130	
Ethylbenzene	ND		25.0	23.5		ug/L	94	70 - 130	
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.4		ug/L	102	70 - 130	
Hexachlorobutadiene	ND		25.0	24.2		ug/L	97	10 - 150	
2-Hexanone	ND		25.0	24.9		ug/L	100	10 - 150	
Isopropylbenzene	ND		25.0	23.5		ug/L	94	70 - 132	
Isopropyl Ether (DIPE)	ND		25.0	26.3		ug/L	105	64 - 138	
Methylene Chloride	ND		25.0	23.9		ug/L	96	52 - 130	
4-Methyl-2-pentanone (MIBK)	ND		25.0	25.7		ug/L	103	52 - 150	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.5		ug/L	98	70 - 130	
m,p-Xylene	ND		25.0	23.8		ug/L	95	70 - 133	
Naphthalene	ND		25.0	23.6		ug/L	94	60 - 140	
n-Butylbenzene	ND		25.0	24.3		ug/L	97	61 - 149	
N-Propylbenzene	ND		25.0	24.2		ug/L	97	66 - 135	
o-Xylene	ND		25.0	24.0		ug/L	96	70 - 133	
p-Isopropyltoluene	ND		25.0	22.9		ug/L	92	70 - 130	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155498-B-1 MS**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
sec-Butylbenzene	ND		25.0	23.1		ug/L	92	67 - 134	
Styrene	ND		25.0	23.0		ug/L	92	29 - 150	
Tert-amyl-methyl ether (TAME)	ND		25.0	24.6		ug/L	99	68 - 133	
tert-Butyl alcohol (TBA)	ND		250	249		ug/L	99	70 - 130	
tert-Butylbenzene	ND		25.0	23.4		ug/L	94	70 - 130	
1,1,1,2-Tetrachloroethane	ND		25.0	22.7		ug/L	91	60 - 149	
1,1,2,2-Tetrachloroethane	ND		25.0	22.7		ug/L	91	63 - 130	
Tetrachloroethylene	2.1		25.0	25.2		ug/L	92	70 - 137	
Toluene	ND		25.0	23.7		ug/L	95	70 - 130	
trans-1,2-Dichloroethylene	ND		25.0	24.5		ug/L	98	70 - 130	
trans-1,3-Dichloropropene	ND		25.0	25.0		ug/L	100	70 - 138	
1,2,3-Trichlorobenzene	ND		25.0	24.5		ug/L	98	60 - 140	
1,2,4-Trichlorobenzene	ND		25.0	25.3		ug/L	101	60 - 140	
1,1,1-Trichloroethane	ND		25.0	24.8		ug/L	99	70 - 130	
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L	94	70 - 130	
Trichloroethene	ND		25.0	24.0		ug/L	96	70 - 130	
Trichlorofluoromethane	ND		25.0	26.0		ug/L	104	60 - 150	
1,2,3-Trichloropropane	ND		25.0	22.6		ug/L	90	60 - 130	
1,2,4-Trimethylbenzene	ND		25.0	23.6		ug/L	95	70 - 130	
1,3,5-Trimethylbenzene	ND		25.0	24.1		ug/L	96	70 - 130	
Vinyl chloride	ND		25.0	25.2		ug/L	101	50 - 137	
<hr/>									
Surrogate	MS		MS		Limits	D	%Rec	%Rec.	RPD
	Surrogate	%Recovery	Qualifer	Limit					
4-Bromofluorobenzene (Surr)	95			80 - 120					
Dibromofluoromethane (Surr)	99			76 - 132					
Toluene-d8 (Surr)	102			80 - 128					

**Lab Sample ID: 440-155498-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		25.0	22.7		ug/L	91	10 - 150		9	35
Benzene	ND		25.0	24.0		ug/L	96	66 - 130		2	20
Bromobenzene	ND		25.0	24.0		ug/L	96	70 - 130		5	20
Bromochloromethane	ND		25.0	25.3		ug/L	101	70 - 130		4	25
Bromodichloromethane	ND		25.0	25.6		ug/L	103	70 - 138		3	20
Bromoform	ND		25.0	26.1		ug/L	104	59 - 150		3	25
Bromomethane	ND		25.0	24.4		ug/L	98	62 - 131		1	25
2-Butanone (MEK)	ND		25.0	23.9		ug/L	95	48 - 140		8	40
Carbon disulfide	ND		25.0	23.6		ug/L	94	49 - 140		2	20
Carbon tetrachloride	ND		25.0	25.1		ug/L	100	60 - 150		2	25
Chlorobenzene	ND		25.0	22.8		ug/L	91	70 - 130		2	20
Chloroethane	ND		25.0	26.0		ug/L	104	68 - 130		3	25
Chloroform	0.33	J	25.0	25.3		ug/L	100	70 - 130		3	20
Chloromethane	ND		25.0	24.7		ug/L	99	39 - 144		3	25
2-Chlorotoluene	ND		25.0	24.9		ug/L	100	70 - 130		3	20
4-Chlorotoluene	ND		25.0	24.8		ug/L	99	70 - 130		1	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155498-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	70 - 130	3	20
cis-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	70 - 133	1	20
Dibromochloromethane	ND		25.0	24.6		ug/L		98	70 - 148	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	24.7		ug/L		99	48 - 140	9	30
1,2-Dibromoethane (EDB)	ND		25.0	24.7		ug/L		99	70 - 131	3	25
Dibromomethane	ND		25.0	24.4		ug/L		98	70 - 130	2	25
1,2-Dichlorobenzene	ND		25.0	24.0		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	ND		25.0	24.1		ug/L		96	70 - 130	3	20
1,4-Dichlorobenzene	ND		25.0	23.8		ug/L		95	70 - 130	2	20
Dichlorodifluoromethane	ND		25.0	24.4		ug/L		97	25 - 142	2	30
1,1-Dichloroethane	ND		25.0	24.6		ug/L		98	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	26.1		ug/L		104	56 - 146	2	20
1,1-Dichloroethene	ND		25.0	23.8		ug/L		95	70 - 130	5	20
1,2-Dichloropropane	ND		25.0	25.1		ug/L		100	69 - 130	2	20
1,3-Dichloropropane	ND		25.0	24.1		ug/L		96	70 - 130	0	25
2,2-Dichloropropane	ND		25.0	25.3		ug/L		101	69 - 138	0	25
1,1-Dichloropropene	ND		25.0	25.7		ug/L		103	64 - 130	3	20
Ethylbenzene	ND		25.0	24.0		ug/L		96	70 - 130	2	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.2		ug/L		105	70 - 130	3	25
Hexachlorobutadiene	ND		25.0	24.7		ug/L		99	10 - 150	2	20
2-Hexanone	ND		25.0	27.0		ug/L		108	10 - 150	8	35
Isopropylbenzene	ND		25.0	24.0		ug/L		96	70 - 132	2	20
Isopropyl Ether (DIPE)	ND		25.0	27.1		ug/L		108	64 - 138	3	25
Methylene Chloride	ND		25.0	24.6		ug/L		98	52 - 130	3	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.1		ug/L		108	52 - 150	5	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.7		ug/L		103	70 - 130	5	25
m,p-Xylene	ND		25.0	24.0		ug/L		96	70 - 133	1	25
Naphthalene	ND		25.0	25.1		ug/L		100	60 - 140	6	30
n-Butylbenzene	ND		25.0	24.5		ug/L		98	61 - 149	1	20
N-Propylbenzene	ND		25.0	24.4		ug/L		97	66 - 135	1	20
o-Xylene	ND		25.0	23.6		ug/L		95	70 - 133	2	20
p-Isopropyltoluene	ND		25.0	24.1		ug/L		96	70 - 130	5	20
sec-Butylbenzene	ND		25.0	23.7		ug/L		95	67 - 134	3	20
Styrene	ND		25.0	23.3		ug/L		93	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.4		ug/L		102	68 - 133	3	30
tert-Butyl alcohol (TBA)	ND		250	226		ug/L		90	70 - 130	10	25
tert-Butylbenzene	ND		25.0	24.0		ug/L		96	70 - 130	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	22.6		ug/L		91	60 - 149	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	63 - 130	5	30
Tetrachloroethene	2.1		25.0	25.0		ug/L		91	70 - 137	1	20
Toluene	ND		25.0	23.7		ug/L		95	70 - 130	0	20
trans-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 138	0	25
1,2,3-Trichlorobenzene	ND		25.0	25.1		ug/L		100	60 - 140	2	20
1,2,4-Trichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	25.6		ug/L		102	70 - 130	3	20
1,1,2-Trichloroethane	ND		25.0	24.4		ug/L		97	70 - 130	3	25
Trichloroethene	ND		25.0	24.4		ug/L		97	70 - 130	2	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155498-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 350264**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Trichlorofluoromethane	ND		25.0	26.6		ug/L		106	60 - 150	2	25
1,2,3-Trichloropropane	ND		25.0	23.6		ug/L		94	60 - 130	4	30
1,2,4-Trimethylbenzene	ND		25.0	24.2		ug/L		97	70 - 130	3	25
1,3,5-Trimethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	2	20
Vinyl chloride	ND		25.0	25.8		ug/L		103	50 - 137	2	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	102		76 - 132
Toluene-d8 (Surr)	101		80 - 128

## Method: 314.0 LL - Perchlorate (IC)

**Lab Sample ID: MB 440-351516/92**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		3.0	0.50	ug/L			08/25/16 19:01	1

**Lab Sample ID: LCS 440-351516/93**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Perchlorate	25.0	24.4		ug/L		98	85 - 115

**Lab Sample ID: MRL 440-351516/62**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	MRL	MRL	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Perchlorate	4.00	3.74		ug/L		94	75 - 125

**Lab Sample ID: 440-155254-D-2 MS**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Perchlorate	ND		25.0	24.9		ug/L		100	80 - 120

**Lab Sample ID: 440-155254-D-2 MSD**

**Matrix: Water**

**Analysis Batch: 351516**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Perchlorate	ND		25.0	25.0		ug/L		100	80 - 120	0	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Method: 314.0 LL - Perchlorate (IC) (Continued)

**Lab Sample ID: MB 440-352030/3**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		3.0	0.50	ug/L	-		08/26/16 09:44	1

**Lab Sample ID: LCS 440-352030/2**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	25.0	24.1		ug/L	-	97	85 - 115

**Lab Sample ID: MRL 440-352030/5**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec.	Limits
Perchlorate	4.00	3.30		ug/L	-	82	75 - 125

**Lab Sample ID: 440-155061-D-4 MS**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	35	F1	25.0	54.2	F1	ug/L	-	77	80 - 120

**Lab Sample ID: 440-155061-D-4 MSD**

**Matrix: Water**

**Analysis Batch: 352030**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Perchlorate	35	F1	25.0	56.3		ug/L	-	85	80 - 120	4	20

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## GC/MS VOA

### Analysis Batch: 350264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155537-1	TB-LW-120816	Total/NA	Water	8260B	1
440-155537-2	IN/5W-34D25-770-GW-120816	Total/NA	Water	8260B	2
440-155537-3	IN/5W-34D35-600-GW-120816	Total/NA	Water	8260B	3
440-155537-4	EB-LW-120816	Total/NA	Water	8260B	4
MB 440-350264/4	Method Blank	Total/NA	Water	8260B	5
LCS 440-350264/5	Lab Control Sample	Total/NA	Water	8260B	6
LCSD 440-350264/6	Lab Control Sample Dup	Total/NA	Water	8260B	7
440-155498-B-1 MS	Matrix Spike	Total/NA	Water	8260B	8
440-155498-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	9

## HPLC/IC

### Analysis Batch: 351516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155537-4	EB-LW-120816	Total/NA	Water	314.0 LL	10
MB 440-351516/92	Method Blank	Total/NA	Water	314.0 LL	11
LCS 440-351516/93	Lab Control Sample	Total/NA	Water	314.0 LL	12
MRL 440-351516/62	Lab Control Sample	Total/NA	Water	314.0 LL	13
440-155254-D-2 MS	Matrix Spike	Total/NA	Water	314.0 LL	
440-155254-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	

### Analysis Batch: 352030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155537-2	IN/5W-34D25-770-GW-120816	Total/NA	Water	314.0 LL	
440-155537-3	IN/5W-34D35-600-GW-120816	Total/NA	Water	314.0 LL	
MB 440-352030/3	Method Blank	Total/NA	Water	314.0 LL	
LCS 440-352030/2	Lab Control Sample	Total/NA	Water	314.0 LL	
MRL 440-352030/5	Lab Control Sample	Total/NA	Water	314.0 LL	
440-155061-D-4 MS	Matrix Spike	Total/NA	Water	314.0 LL	
440-155061-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0 LL	

# Definitions/Glossary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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# Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155537-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

\* Certification renewal pending - certification considered valid.

TestAmerica Irvine

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# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT				LAB - Test America	COC of
				Billing Information:	
				Invoice and Report to: Holly Holbrook 999 W. Town and Country Road Orange, CA 92868-4713 <a href="http://www.aecom.com">www.aecom.com</a>	
CHAIN OF CUSTODY					
CLIENT	AECOM				
SITE	Rockets, Fireworks, and Flares				
Rialto, CA					
SAMPLE I.D.	DATE	TIME	MATRIX#	CONTAINERS	
TB-LW-120816	8/12/16	0700	LW	3 Vials	
LN/5W-34D25-77D-6W-120816	8/12/16	0830	LW	3 Vials 1 Poly	X X
LN/5W-34D35-600-6W-120816	8/12/16	0840	LW	3 Vials 1 Poly	X X
EB-LW-120816	8/12/16	0900	LW	3 Vials 1 Poly	X X
VOC's 8260B					
Perchlorate 314.0					
ADD'L INFORMATION					
440-1-55537 Chain of Custody					
SAMPLING COMPLETED	DATE 8/12/16	TIME 0700	SAMPLING PERFORMED BY TC/DR	RESULTS NEEDED NO LATER THAN As Contracted	
RELEASED BY TC/DR	8/12/16 1600		RECEIVED BY TC/DR	TIME 1600	
RELEASED BY TC/DR	TIME 1600		RECEIVED BY TC/DR	TIME 1420	
SHIPPED VIA UPS	TIME SENT 1745		COOLER #	TIME 1745	

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155537-1

**Login Number:** 155537

**List Source:** TestAmerica Irvine

**List Number:** 1

**Creator:** Chavez, Yonny 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-155681-1

Client Project/Site: RFF Rialto Treatment, 60438759

For:

AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook

Authorized for release by:

8/31/2016 10:25:55 AM

Patty Mata, Senior Project Manager

(949)261-1022

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### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155681-1	TB-LW-150816	Water	08/15/16 07:00	08/16/16 17:50
440-155681-2	EMW-7D-540-GW-150816	Water	08/15/16 07:25	08/16/16 17:50
440-155681-3	EMW-7S-470-GW-150816	Water	08/15/16 07:35	08/16/16 17:50
440-155681-4	EB-LW-150816	Water	08/15/16 07:45	08/16/16 17:50
440-155681-5	EMW-1A-470-GW-150816	Water	08/15/16 08:30	08/16/16 17:50
440-155681-6	EMW-1A-470-GW-150816-D	Water	08/15/16 08:35	08/16/16 17:50
440-155681-7	EMW-1B-556-GW-150816	Water	08/15/16 08:10	08/16/16 17:50
440-155681-8	EMW-6D-584-GW-150816	Water	08/15/16 09:10	08/16/16 17:50
440-155681-9	EMW-6D-584-GW-150816-D	Water	08/15/16 09:15	08/16/16 17:50
440-155681-10	EMW-6S-477-GW-150816	Water	08/15/16 09:20	08/16/16 17:50
440-155681-11	EPA-MW9B-725-GW-150816	Water	08/15/16 09:50	08/16/16 17:50
440-155681-12	EPA-MW9A-530-GW-150816	Water	08/15/16 10:05	08/16/16 17:50
440-155681-13	EPA-MW9A-530-GW-150816-D	Water	08/15/16 10:10	08/16/16 17:50
440-155681-14	Rialto-2-990-GW-150816	Water	08/15/16 11:00	08/16/16 17:50
440-155681-15	EMW-4C-690-GW-150816	Water	08/15/16 12:20	08/16/16 17:50
440-155681-16	EMW-4B-605-GW-150816	Water	08/15/16 12:30	08/16/16 17:50
440-155681-17	EMW-4A-450-GW-150816	Water	08/15/16 12:45	08/16/16 17:50

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## Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

### Job ID: 440-155681-1

Laboratory: TestAmerica Irvine

#### Narrative

Job Narrative  
440-155681-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/16/2016 5:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6° C and 4.2° C.

#### GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: TB-LW-150816**

**Lab Sample ID: 440-155681-1**

**Matrix: Water**

**Date Collected: 08/15/16 07:00**

**Date Received: 08/16/16 17:50**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 14:18	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 14:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 14:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 14:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 14:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 14:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 14:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 14:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 14:18	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 14:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 14:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 14:18	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 14:18	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 14:18	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 14:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 14:18	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 14:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 14:18	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 14:18	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 14:18	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 14:18	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
o-Xylene	ND		1.0	0.25	ug/L			08/21/16 14:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: TB-LW-150816**

Date Collected: 08/15/16 07:00

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 14:18	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 14:18	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Toluene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 14:18	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 14:18	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 14:18	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/21/16 14:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 14:18	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 14:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:18	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 14:18	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 14:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		80 - 120					08/21/16 14:18	1
Dibromofluoromethane (Surr)	105		76 - 132					08/21/16 14:18	1
Toluene-d8 (Surr)	105		80 - 128					08/21/16 14:18	1

**Client Sample ID: EMW-7D-540-GW-150816**

Date Collected: 08/15/16 07:25

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-2**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 17:59	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 17:59	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 17:59	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 17:59	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 17:59	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 17:59	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 17:59	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 17:59	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 17:59	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 17:59	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 17:59	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:59	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 17:59	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 17:59	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-7D-540-GW-150816**

**Lab Sample ID: 440-155681-2**

**Matrix: Water**

Date Collected: 08/15/16 07:25

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Chloromethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/21/16 17:59		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Dibromomethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/21/16 17:59		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/21/16 17:59		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/21/16 17:59		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 17:59		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 17:59		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 17:59		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 17:59		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 17:59		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 17:59		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 17:59		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 17:59		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 17:59		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
o-Xylene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/21/16 17:59		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/21/16 17:59		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:59		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 17:59		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
<b>Toluene</b>	<b>2.2</b>		1.0	0.25	ug/L		08/21/16 17:59		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/21/16 17:59		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 17:59		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 17:59		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-7D-540-GW-150816**

**Lab Sample ID: 440-155681-2**

**Matrix: Water**

Date Collected: 08/15/16 07:25

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 17:59	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 17:59	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 17:59	1
<b>Trichloroethylene</b>	<b>1.1</b>		1.0	0.25	ug/L			08/21/16 17:59	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 17:59	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 17:59	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 17:59	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 17:59	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 17:59	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 17:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/21/16 17:59	1
Dibromofluoromethane (Surr)	104		76 - 132					08/21/16 17:59	1
Toluene-d8 (Surr)	106		80 - 128					08/21/16 17:59	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>33</b>		1.0	0.28	ug/L			08/25/16 00:44	1

**Client Sample ID: EMW-7S-470-GW-150816**

**Lab Sample ID: 440-155681-3**

**Matrix: Water**

Date Collected: 08/15/16 07:35

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 18:27	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 18:27	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 18:27	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 18:27	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 18:27	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 18:27	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 18:27	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:27	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 18:27	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 18:27	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 18:27	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:27	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:27	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:27	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 18:27	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 18:27	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 18:27	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 18:27	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-7S-470-GW-150816**

**Lab Sample ID: 440-155681-3**

**Matrix: Water**

Date Collected: 08/15/16 07:35

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/21/16 18:27		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/21/16 18:27		1
1,1-Dichloroethylene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/21/16 18:27		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 18:27		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 18:27		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 18:27		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 18:27		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 18:27		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 18:27		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 18:27		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 18:27		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 18:27		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
o-Xylene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/21/16 18:27		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/21/16 18:27		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
<b>Toluene</b>	<b>0.98</b>	<b>J</b>	1.0	0.25	ug/L		08/21/16 18:27		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/21/16 18:27		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 18:27		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 18:27		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
<b>Trichloroethene</b>	<b>2.9</b>		1.0	0.25	ug/L		08/21/16 18:27		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/21/16 18:27		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/21/16 18:27		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:27		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/21/16 18:27		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/21/16 18:27		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-7S-470-GW-150816**

**Lab Sample ID: 440-155681-3**

Matrix: Water

Date Collected: 08/15/16 07:35

Date Received: 08/16/16 17:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		08/21/16 18:27	1
Dibromofluoromethane (Surr)	104		76 - 132		08/21/16 18:27	1
Toluene-d8 (Surr)	106		80 - 128		08/21/16 18:27	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	57		10	2.8	ug/L			08/25/16 10:37	10

**Client Sample ID: EB-LW-150816**

**Lab Sample ID: 440-155681-4**

Matrix: Water

Date Collected: 08/15/16 07:45

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 14:45	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 14:45	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 14:45	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 14:45	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 14:45	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 14:45	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 14:45	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 14:45	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 14:45	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 14:45	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 14:45	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 14:45	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 14:45	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EB-LW-150816**

**Lab Sample ID: 440-155681-4**

**Matrix: Water**

Date Collected: 08/15/16 07:45

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 14:45	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 14:45	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 14:45	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 14:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 14:45	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 14:45	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 14:45	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 14:45	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
o-Xylene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 14:45	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 14:45	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Toluene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 14:45	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 14:45	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 14:45	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Trichloroethene	ND		1.0	0.25	ug/L			08/21/16 14:45	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 14:45	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 14:45	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 14:45	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 14:45	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 14:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98			80 - 120				08/21/16 14:45	1
Dibromofluoromethane (Surr)	106			76 - 132				08/21/16 14:45	1
Toluene-d8 (Surr)	105			80 - 128				08/21/16 14:45	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/25/16 01:30	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1A-470-GW-150816**

**Lab Sample ID: 440-155681-5**

**Matrix: Water**

Date Collected: 08/15/16 08:30

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 18:55	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 18:55	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Bromoform	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 18:55	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 18:55	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 18:55	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 18:55	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 18:55	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 18:55	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 18:55	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 18:55	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 18:55	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 18:55	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 18:55	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 18:55	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 18:55	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 18:55	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 18:55	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 18:55	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 18:55	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 18:55	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 18:55	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
o-Xylene	ND		1.0	0.25	ug/L			08/21/16 18:55	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1A-470-GW-150816**

**Lab Sample ID: 440-155681-5**

**Matrix: Water**

Date Collected: 08/15/16 08:30  
Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 18:55	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 18:55	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
<b>Toluene</b>	<b>1.2</b>		1.0	0.25	ug/L			08/21/16 18:55	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 18:55	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 18:55	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 18:55	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
<b>Trichloroethylene</b>	<b>2.0</b>		1.0	0.25	ug/L			08/21/16 18:55	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 18:55	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 18:55	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 18:55	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 18:55	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 18:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		80 - 120					08/21/16 18:55	1
Dibromofluoromethane (Surr)	103		76 - 132					08/21/16 18:55	1
Toluene-d8 (Surr)	106		80 - 128					08/21/16 18:55	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>15</b>		1.0	0.28	ug/L			08/25/16 01:53	1

**Client Sample ID: EMW-1A-470-GW-150816-D**

**Lab Sample ID: 440-155681-6**

**Matrix: Water**

Date Collected: 08/15/16 08:35  
Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 19:23	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 19:23	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 19:23	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 19:23	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 19:23	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 19:23	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 19:23	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1A-470-GW-150816-D**

**Lab Sample ID: 440-155681-6**

**Matrix: Water**

Date Collected: 08/15/16 08:35

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 19:23	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 19:23	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 19:23	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 19:23	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 19:23	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 19:23	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 19:23	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 19:23	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 19:23	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 19:23	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 19:23	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 19:23	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 19:23	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 19:23	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 19:23	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
o-Xylene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 19:23	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 19:23	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
<b>Toluene</b>	<b>0.92 J</b>		1.0	0.25	ug/L			08/21/16 19:23	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1A-470-GW-150816-D**

**Lab Sample ID: 440-155681-6**

**Matrix: Water**

Date Collected: 08/15/16 08:35

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 19:23	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 19:23	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 19:23	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
<b>Trichloroethene</b>	<b>2.0</b>		1.0	0.25	ug/L			08/21/16 19:23	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 19:23	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 19:23	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 19:23	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 19:23	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 19:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95		80 - 120					08/21/16 19:23	1
Dibromofluoromethane (Surr)	103		76 - 132					08/21/16 19:23	1
Toluene-d8 (Surr)	106		80 - 128					08/21/16 19:23	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>15</b>		1.0	0.28	ug/L			08/25/16 02:16	1

**Client Sample ID: EMW-1B-556-GW-150816**

**Lab Sample ID: 440-155681-7**

**Matrix: Water**

Date Collected: 08/15/16 08:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 12:27	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 12:27	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 12:27	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 12:27	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 12:27	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 12:27	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 12:27	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 12:27	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 12:27	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 12:27	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1B-556-GW-150816**

**Lab Sample ID: 440-155681-7**

**Matrix: Water**

Date Collected: 08/15/16 08:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 12:27	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 12:27	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
<b>1,2-Dichloroethane</b>	<b>0.73</b>		0.50	0.25	ug/L			08/21/16 12:27	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 12:27	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
<b>Ethylbenzene</b>	<b>1.2</b>		1.0	0.25	ug/L			08/21/16 12:27	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 12:27	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 12:27	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 12:27	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 12:27	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 12:27	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 12:27	1
<b>m,p-Xylene</b>	<b>0.61 J</b>		1.0	0.50	ug/L			08/21/16 12:27	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 12:27	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 12:27	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
<b>o-Xylene</b>	<b>0.77 J</b>		1.0	0.25	ug/L			08/21/16 12:27	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 12:27	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 12:27	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
<b>Toluene</b>	<b>20</b>		1.0	0.25	ug/L			08/21/16 12:27	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 12:27	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 12:27	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 12:27	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
<b>Trichloroethene</b>	<b>6.0</b>		1.0	0.25	ug/L			08/21/16 12:27	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 12:27	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 12:27	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-1B-556-GW-150816**

**Lab Sample ID: 440-155681-7**

**Matrix: Water**

Date Collected: 08/15/16 08:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 12:27	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 12:27	1
<b>Xylenes, Total</b>	<b>1.4</b>	<b>J</b>	2.0	0.50	ug/L			08/21/16 12:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	95		80 - 120					08/21/16 12:27	1
Dibromofluoromethane (Surr)	102		76 - 132					08/21/16 12:27	1
Toluene-d8 (Surr)	106		80 - 128					08/21/16 12:27	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	380		50	14	ug/L			08/25/16 11:00	50

**Client Sample ID: EMW-6D-584-GW-150816**

**Lab Sample ID: 440-155681-8**

**Matrix: Water**

Date Collected: 08/15/16 09:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 16:06	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 16:06	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 16:06	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 16:06	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 16:06	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 16:06	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 16:06	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 16:06	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 16:06	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 16:06	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 16:06	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 16:06	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:06	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 16:06	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:06	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 16:06	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-6D-584-GW-150816**

**Lab Sample ID: 440-155681-8**

**Matrix: Water**

Date Collected: 08/15/16 09:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/21/16 16:06		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 16:06		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 16:06		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 16:06		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 16:06		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 16:06		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 16:06		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 16:06		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 16:06		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 16:06		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
o-Xylene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/21/16 16:06		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/21/16 16:06		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
<b>Toluene</b>	<b>1.2</b>		1.0	0.25	ug/L		08/21/16 16:06		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/21/16 16:06		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 16:06		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 16:06		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
<b>Trichloroethene</b>	<b>11</b>		1.0	0.25	ug/L		08/21/16 16:06		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/21/16 16:06		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/21/16 16:06		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:06		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/21/16 16:06		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/21/16 16:06		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surr)	103		80 - 120				08/21/16 16:06		1
Dibromofluoromethane (Surr)	98		76 - 132				08/21/16 16:06		1
Toluene-d8 (Surr)	104		80 - 128				08/21/16 16:06		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-6D-584-GW-150816**

**Lab Sample ID: 440-155681-8**

Matrix: Water

Date Collected: 08/15/16 09:10

Date Received: 08/16/16 17:50

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	62		10	2.8	ug/L			08/25/16 11:22	10

**Client Sample ID: EMW-6D-584-GW-150816-D**

**Lab Sample ID: 440-155681-9**

Matrix: Water

Date Collected: 08/15/16 09:15

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 16:32	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 16:32	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 16:32	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 16:32	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 16:32	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 16:32	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 16:32	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 16:32	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 16:32	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 16:32	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 16:32	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 16:32	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
2,2-Dichloropropene	ND		1.0	0.40	ug/L			08/21/16 16:32	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 16:32	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 16:32	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 16:32	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 16:32	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-6D-584-GW-150816-D**

**Lab Sample ID: 440-155681-9**

Matrix: Water

Date Collected: 08/15/16 09:15

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 16:32	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 16:32	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 16:32	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 16:32	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 16:32	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
o-Xylene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 16:32	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 16:32	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
<b>Toluene</b>	<b>0.88 J</b>		1.0	0.25	ug/L			08/21/16 16:32	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 16:32	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
<b>Trichloroethene</b>	<b>9.0</b>		1.0	0.25	ug/L			08/21/16 16:32	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 16:32	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 16:32	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:32	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 16:32	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 16:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97			80 - 120				08/21/16 16:32	1
Dibromofluoromethane (Surr)	100			76 - 132				08/21/16 16:32	1
Toluene-d8 (Surr)	104			80 - 128				08/21/16 16:32	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	64		2.0	0.55	ug/L			08/25/16 13:43	2

**Client Sample ID: EMW-6S-477-GW-150816**

**Lab Sample ID: 440-155681-10**

Matrix: Water

Date Collected: 08/15/16 09:20

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 16:58	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 16:58	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 16:58	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-6S-477-GW-150816**

**Lab Sample ID: 440-155681-10**

Date Collected: 08/15/16 09:20

Matrix: Water

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Bromodichloromethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Bromoform	ND		1.0	0.40	ug/L		08/21/16 16:58		1
Bromomethane	ND		2.0	0.25	ug/L		08/21/16 16:58		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/21/16 16:58		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/21/16 16:58		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/21/16 16:58		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/21/16 16:58		1
Chloroethane	ND		1.0	0.40	ug/L		08/21/16 16:58		1
Chloroform	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Chloromethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/21/16 16:58		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Dibromomethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/21/16 16:58		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/21/16 16:58		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,2-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
2,2-Dichloropropene	ND		1.0	0.40	ug/L		08/21/16 16:58		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 16:58		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 16:58		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 16:58		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 16:58		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 16:58		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 16:58		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 16:58		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 16:58		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 16:58		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
o-Xylene	ND		1.0	0.25	ug/L		08/21/16 16:58		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 16:58		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 16:58		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-6S-477-GW-150816**

**Lab Sample ID: 440-155681-10**

Date Collected: 08/15/16 09:20  
Date Received: 08/16/16 17:50

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 16:58	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 16:58	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 16:58	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 16:58	1
<b>Toluene</b>	<b>0.74 J</b>		1.0	0.25	ug/L			08/21/16 16:58	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 16:58	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 16:58	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 16:58	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 16:58	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 16:58	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:58	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 16:58	1
<b>Trichloroethene</b>	<b>2.1</b>		1.0	0.25	ug/L			08/21/16 16:58	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 16:58	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 16:58	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:58	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/21/16 16:58	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 16:58	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/21/16 16:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99			80 - 120				08/21/16 16:58	1
Dibromofluoromethane (Surr)	98			76 - 132				08/21/16 16:58	1
Toluene-d8 (Surr)	104			80 - 128				08/21/16 16:58	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	16		1.0	0.28	ug/L			08/25/16 05:19	1

**Client Sample ID: EPA-MW9B-725-GW-150816**

**Lab Sample ID: 440-155681-11**

Date Collected: 08/15/16 09:50  
Date Received: 08/16/16 17:50

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 17:24	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 17:24	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 17:24	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 17:24	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 17:24	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 17:24	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 17:24	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 17:24	1

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# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9B-725-GW-150816**

**Lab Sample ID: 440-155681-11**

**Matrix: Water**

Date Collected: 08/15/16 09:50

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 17:24	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 17:24	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 17:24	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
<b>1,2-Dichloroethane</b>	<b>0.49</b>	<b>J</b>	0.50	0.25	ug/L			08/21/16 17:24	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 17:24	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
<b>Ethylbenzene</b>	<b>0.51</b>	<b>J</b>	1.0	0.25	ug/L			08/21/16 17:24	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 17:24	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 17:24	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 17:24	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 17:24	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 17:24	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 17:24	1
<b>m,p-Xylene</b>	<b>1.1</b>		1.0	0.50	ug/L			08/21/16 17:24	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 17:24	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 17:24	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
<b>o-Xylene</b>	<b>3.0</b>		1.0	0.25	ug/L			08/21/16 17:24	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
Styrene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/21/16 17:24	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/21/16 17:24	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/21/16 17:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
<b>Toluene</b>	<b>1.6</b>		1.0	0.25	ug/L			08/21/16 17:24	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/21/16 17:24	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 17:24	1

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# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9B-725-GW-150816**

**Lab Sample ID: 440-155681-11**

**Matrix: Water**

Date Collected: 08/15/16 09:50

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 17:24	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/21/16 17:24	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Trichloroethene	ND		1.0	0.25	ug/L			08/21/16 17:24	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/21/16 17:24	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/21/16 17:24	1
<b>1,2,4-Trimethylbenzene</b>	<b>1.3 J</b>		2.0	0.25	ug/L			08/21/16 17:24	1
<b>1,3,5-Trimethylbenzene</b>	<b>0.58 J</b>		2.0	0.25	ug/L			08/21/16 17:24	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/21/16 17:24	1
<b>Xylenes, Total</b>	<b>4.1</b>		2.0	0.50	ug/L			08/21/16 17:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99			80 - 120				08/21/16 17:24	1
Dibromofluoromethane (Surr)	97			76 - 132				08/21/16 17:24	1
Toluene-d8 (Surr)	108			80 - 128				08/21/16 17:24	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/25/16 05:42	1

**Client Sample ID: EPA-MW9A-530-GW-150816**

**Lab Sample ID: 440-155681-12**

**Matrix: Water**

Date Collected: 08/15/16 10:05

Date Received: 08/16/16 17:50

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 17:51	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 17:51	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 17:51	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 17:51	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 17:51	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 17:51	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 17:51	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 17:51	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 17:51	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 17:51	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 17:51	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 17:51	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 17:51	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 17:51	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 17:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 17:51	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 17:51	1

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# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9A-530-GW-150816**

**Lab Sample ID: 440-155681-12**

**Matrix: Water**

Date Collected: 08/15/16 10:05

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/21/16 17:51		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
<b>1,2-Dichloroethane</b>	<b>0.83</b>		0.50	0.25	ug/L		08/21/16 17:51		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/21/16 17:51		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 17:51		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 17:51		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 17:51		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 17:51		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 17:51		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 17:51		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 17:51		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 17:51		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 17:51		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
<b>o-Xylene</b>	<b>1.0</b>		1.0	0.25	ug/L		08/21/16 17:51		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/21/16 17:51		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/21/16 17:51		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
<b>Toluene</b>	<b>25</b>		1.0	0.25	ug/L		08/21/16 17:51		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/21/16 17:51		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 17:51		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 17:51		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
<b>Trichloroethene</b>	<b>2.9</b>		1.0	0.25	ug/L		08/21/16 17:51		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/21/16 17:51		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/21/16 17:51		1
<b>1,2,4-Trimethylbenzene</b>	<b>0.37 J</b>		2.0	0.25	ug/L		08/21/16 17:51		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 17:51		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/21/16 17:51		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9A-530-GW-150816**

Date Collected: 08/15/16 10:05

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-12**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	1.0	J	2.0	0.50	ug/L			08/21/16 17:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		80 - 120					08/21/16 17:51	1
Dibromofluoromethane (Surr)	96		76 - 132					08/21/16 17:51	1
Toluene-d8 (Surr)	105		80 - 128					08/21/16 17:51	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	40		1.0	0.28	ug/L			08/25/16 06:05	1

**Client Sample ID: EPA-MW9A-530-GW-150816-D**

Date Collected: 08/15/16 10:10

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-13**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/21/16 18:17	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 18:17	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 18:17	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 18:17	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 18:17	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 18:17	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 18:17	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 18:17	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 18:17	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:17	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 18:17	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 18:17	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 18:17	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 18:17	1
<b>1,2-Dichloroethane</b>	<b>0.54</b>		0.50	0.25	ug/L			08/21/16 18:17	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:17	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 18:17	1

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# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9A-530-GW-150816-D**

**Lab Sample ID: 440-155681-13**

**Matrix: Water**

Date Collected: 08/15/16 10:10

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/21/16 18:17		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/21/16 18:17		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
2-Hexanone	ND		10	2.5	ug/L		08/21/16 18:17		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/21/16 18:17		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/21/16 18:17		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/21/16 18:17		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/21/16 18:17		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/21/16 18:17		1
Naphthalene	ND		5.0	0.40	ug/L		08/21/16 18:17		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/21/16 18:17		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
<b>o-Xylene</b>	<b>0.52</b>	<b>J</b>	1.0	0.25	ug/L		08/21/16 18:17		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
Styrene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/21/16 18:17		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/21/16 18:17		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 18:17		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/21/16 18:17		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
<b>Toluene</b>	<b>14</b>		1.0	0.25	ug/L		08/21/16 18:17		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/21/16 18:17		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/21/16 18:17		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 18:17		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/21/16 18:17		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 18:17		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/21/16 18:17		1
<b>Trichloroethene</b>	<b>3.0</b>		1.0	0.25	ug/L		08/21/16 18:17		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/21/16 18:17		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/21/16 18:17		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/21/16 18:17		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/21/16 18:17		1
<b>Xylenes, Total</b>	<b>0.52</b>	<b>J</b>	2.0	0.50	ug/L		08/21/16 18:17		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100			80 - 120			08/21/16 18:17		1
Dibromofluoromethane (Surr)	99			76 - 132			08/21/16 18:17		1
Toluene-d8 (Surr)	104			80 - 128			08/21/16 18:17		1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	62		10	2.8	ug/L			08/25/16 11:45	10

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: Rialto-2-990-GW-150816**

Date Collected: 08/15/16 11:00

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-14**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L		08/22/16 16:00		1
Benzene	ND		0.50	0.25	ug/L		08/22/16 16:00		1
Bromobenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Bromoform	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Bromomethane	ND		2.0	0.25	ug/L		08/22/16 16:00		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/22/16 16:00		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/22/16 16:00		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/22/16 16:00		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/22/16 16:00		1
Chloroethane	ND		1.0	0.40	ug/L		08/22/16 16:00		1
Chloroform	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Chloromethane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/22/16 16:00		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/22/16 16:00		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/22/16 16:00		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Dibromomethane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/22/16 16:00		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/22/16 16:00		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 16:00		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/22/16 16:00		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/22/16 16:00		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/22/16 16:00		1
2-Hexanone	ND		10	2.5	ug/L		08/22/16 16:00		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/22/16 16:00		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/22/16 16:00		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/22/16 16:00		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/22/16 16:00		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/22/16 16:00		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/22/16 16:00		1
Naphthalene	ND		5.0	0.40	ug/L		08/22/16 16:00		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/22/16 16:00		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/22/16 16:00		1
o-Xylene	ND		1.0	0.25	ug/L		08/22/16 16:00		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Client Sample ID: Rialto-2-990-GW-150816

Date Collected: 08/15/16 11:00

Date Received: 08/16/16 17:50

## Lab Sample ID: 440-155681-14

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/22/16 16:00	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:00	1
Styrene	ND		1.0	0.25	ug/L			08/22/16 16:00	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/22/16 16:00	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/22/16 16:00	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/22/16 16:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/22/16 16:00	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/22/16 16:00	1
Toluene	ND		1.0	0.25	ug/L			08/22/16 16:00	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/22/16 16:00	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/22/16 16:00	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:00	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/22/16 16:00	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/22/16 16:00	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/22/16 16:00	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/22/16 16:00	1
<b>Trichloroethylene</b>	<b>4.1</b>		1.0	0.25	ug/L			08/22/16 16:00	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/22/16 16:00	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/22/16 16:00	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:00	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:00	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/22/16 16:00	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/22/16 16:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101		80 - 120					08/22/16 16:00	1
Dibromofluoromethane (Surr)	101		76 - 132					08/22/16 16:00	1
Toluene-d8 (Surr)	103		80 - 128					08/22/16 16:00	1

### Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	9.9		1.0	0.28	ug/L			08/25/16 06:51	1

## Client Sample ID: EMW-4C-690-GW-150816

Date Collected: 08/15/16 12:20

Date Received: 08/16/16 17:50

## Lab Sample ID: 440-155681-15

Matrix: Water

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/22/16 16:26	1
Benzene	ND		0.50	0.25	ug/L			08/22/16 16:26	1
Bromobenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Bromoform	ND		1.0	0.40	ug/L			08/22/16 16:26	1
Bromomethane	ND		2.0	0.25	ug/L			08/22/16 16:26	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/22/16 16:26	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/22/16 16:26	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/22/16 16:26	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4C-690-GW-150816**

**Lab Sample ID: 440-155681-15**

**Matrix: Water**

Date Collected: 08/15/16 12:20

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/22/16 16:26	1
Chloroethane	ND		1.0	0.40	ug/L			08/22/16 16:26	1
Chloroform	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Chloromethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/22/16 16:26	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Dibromomethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/22/16 16:26	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/22/16 16:26	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
2,2-Dichloropropene	ND		1.0	0.40	ug/L			08/22/16 16:26	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/22/16 16:26	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
2-Hexanone	ND		10	2.5	ug/L			08/22/16 16:26	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/22/16 16:26	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/22/16 16:26	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/22/16 16:26	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/22/16 16:26	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/22/16 16:26	1
Naphthalene	ND		5.0	0.40	ug/L			08/22/16 16:26	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/22/16 16:26	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
o-Xylene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
Styrene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/22/16 16:26	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/22/16 16:26	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
<b>Toluene</b>	<b>3.5</b>		1.0	0.25	ug/L			08/22/16 16:26	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4C-690-GW-150816**

**Lab Sample ID: 440-155681-15**

**Matrix: Water**

Date Collected: 08/15/16 12:20

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/22/16 16:26	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/22/16 16:26	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/22/16 16:26	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
<b>Trichloroethene</b>	<b>0.38 J</b>		1.0	0.25	ug/L			08/22/16 16:26	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/22/16 16:26	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/22/16 16:26	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:26	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/22/16 16:26	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/22/16 16:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		80 - 120					08/22/16 16:26	1
Dibromofluoromethane (Surr)	101		76 - 132					08/22/16 16:26	1
Toluene-d8 (Surr)	103		80 - 128					08/22/16 16:26	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>1.4</b>		1.0	0.28	ug/L			08/25/16 07:14	1

**Client Sample ID: EMW-4B-605-GW-150816**

**Lab Sample ID: 440-155681-16**

**Matrix: Water**

Date Collected: 08/15/16 12:30

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/22/16 16:52	1
Benzene	ND		0.50	0.25	ug/L			08/22/16 16:52	1
Bromobenzene	ND		1.0	0.25	ug/L			08/22/16 16:52	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/22/16 16:52	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/22/16 16:52	1
Bromoform	ND		1.0	0.40	ug/L			08/22/16 16:52	1
Bromomethane	ND		2.0	0.25	ug/L			08/22/16 16:52	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/22/16 16:52	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/22/16 16:52	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/22/16 16:52	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/22/16 16:52	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/22/16 16:52	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/22/16 16:52	1
Chloroethane	ND		1.0	0.40	ug/L			08/22/16 16:52	1
Chloroform	ND		1.0	0.25	ug/L			08/22/16 16:52	1
Chloromethane	ND		1.0	0.25	ug/L			08/22/16 16:52	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 16:52	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 16:52	1
<b>cis-1,2-Dichloroethene</b>	<b>0.61 J</b>		1.0	0.25	ug/L			08/22/16 16:52	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 16:52	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4B-605-GW-150816**

Date Collected: 08/15/16 12:30

Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-16**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/22/16 16:52		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Dibromomethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/22/16 16:52		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/22/16 16:52		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/22/16 16:52		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/22/16 16:52		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/22/16 16:52		1
2-Hexanone	ND		10	2.5	ug/L		08/22/16 16:52		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/22/16 16:52		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/22/16 16:52		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/22/16 16:52		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/22/16 16:52		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/22/16 16:52		1
Naphthalene	ND		5.0	0.40	ug/L		08/22/16 16:52		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/22/16 16:52		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/22/16 16:52		1
o-Xylene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/22/16 16:52		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/22/16 16:52		1
Styrene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/22/16 16:52		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/22/16 16:52		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/22/16 16:52		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
<b>Toluene</b>	<b>1.6</b>		1.0	0.25	ug/L		08/22/16 16:52		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/22/16 16:52		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/22/16 16:52		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/22/16 16:52		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
<b>Trichloroethene</b>	<b>5.8</b>		1.0	0.25	ug/L		08/22/16 16:52		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/22/16 16:52		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/22/16 16:52		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4B-605-GW-150816**

**Lab Sample ID: 440-155681-16**

Matrix: Water

Date Collected: 08/15/16 12:30

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:52	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/22/16 16:52	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/22/16 16:52	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/22/16 16:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					08/22/16 16:52	1
Dibromofluoromethane (Surr)	101		76 - 132					08/22/16 16:52	1
Toluene-d8 (Surr)	105		80 - 128					08/22/16 16:52	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	7.0		1.0	0.28	ug/L			08/25/16 08:43	1

**Client Sample ID: EMW-4A-450-GW-150816**

**Lab Sample ID: 440-155681-17**

Matrix: Water

Date Collected: 08/15/16 12:45

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/22/16 17:18	1
Benzene	ND		0.50	0.25	ug/L			08/22/16 17:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Bromoform	ND		1.0	0.40	ug/L			08/22/16 17:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/22/16 17:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/22/16 17:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/22/16 17:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/22/16 17:18	1
<b>Carbon tetrachloride</b>	<b>2.7</b>		1.0	0.25	ug/L			08/22/16 17:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/22/16 17:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/22/16 17:18	1
<b>Chloroform</b>	<b>0.36 J</b>		1.0	0.25	ug/L			08/22/16 17:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 17:18	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/22/16 17:18	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/22/16 17:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Dibromomethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/22/16 17:18	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/22/16 17:18	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/22/16 17:18	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/22/16 17:18	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4A-450-GW-150816**

**Lab Sample ID: 440-155681-17**

**Matrix: Water**

Date Collected: 08/15/16 12:45

Date Received: 08/16/16 17:50

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/22/16 17:18		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/22/16 17:18		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
2-Hexanone	ND		10	2.5	ug/L		08/22/16 17:18		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/22/16 17:18		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/22/16 17:18		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/22/16 17:18		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/22/16 17:18		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/22/16 17:18		1
Naphthalene	ND		5.0	0.40	ug/L		08/22/16 17:18		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/22/16 17:18		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
o-Xylene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
Styrene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/22/16 17:18		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/22/16 17:18		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
Toluene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/22/16 17:18		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/22/16 17:18		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/22/16 17:18		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
<b>Trichloroethene</b>	<b>14</b>		1.0	0.25	ug/L		08/22/16 17:18		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/22/16 17:18		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/22/16 17:18		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/22/16 17:18		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/22/16 17:18		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/22/16 17:18		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		80 - 120				08/22/16 17:18		1
Dibromofluoromethane (Surr)	100		76 - 132				08/22/16 17:18		1
Toluene-d8 (Surr)	106		80 - 128				08/22/16 17:18		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EMW-4A-450-GW-150816**

**Lab Sample ID: 440-155681-17**

Matrix: Water

Date Collected: 08/15/16 12:45

Date Received: 08/16/16 17:50

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	120		10	2.8	ug/L			08/25/16 12:08	10

## Method Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0	Perchlorate (IC)	EPA	TAL PHX

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: TB-LW-150816**

**Lab Sample ID: 440-155681-1**

Date Collected: 08/15/16 07:00

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 14:18	LMB	TAL IRV

**Client Sample ID: EMW-7D-540-GW-150816**

**Lab Sample ID: 440-155681-2**

Date Collected: 08/15/16 07:25

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 17:59	LMB	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 00:44	BCB	TAL PHX

**Client Sample ID: EMW-7S-470-GW-150816**

**Lab Sample ID: 440-155681-3**

Date Collected: 08/15/16 07:35

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 18:27	LMB	TAL IRV
Total/NA	Analysis	314.0		10			96749	08/25/16 10:37	BCB	TAL PHX

**Client Sample ID: EB-LW-150816**

**Lab Sample ID: 440-155681-4**

Date Collected: 08/15/16 07:45

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 14:45	LMB	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 01:30	BCB	TAL PHX

**Client Sample ID: EMW-1A-470-GW-150816**

**Lab Sample ID: 440-155681-5**

Date Collected: 08/15/16 08:30

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 18:55	LMB	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 01:53	BCB	TAL PHX

**Client Sample ID: EMW-1A-470-GW-150816-D**

**Lab Sample ID: 440-155681-6**

Date Collected: 08/15/16 08:35

Matrix: Water

Date Received: 08/16/16 17:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 19:23	LMB	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 02:16	BCB	TAL PHX

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

### Client Sample ID: EMW-1B-556-GW-150816

Date Collected: 08/15/16 08:10  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350815	08/21/16 12:27	LMB	TAL IRV
Total/NA	Analysis	314.0		50			96749	08/25/16 11:00	BCB	TAL PHX

### Client Sample ID: EMW-6D-584-GW-150816

Date Collected: 08/15/16 09:10  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 16:06	TCN	TAL IRV
Total/NA	Analysis	314.0		10			96749	08/25/16 11:22	BCB	TAL PHX

### Client Sample ID: EMW-6D-584-GW-150816-D

Date Collected: 08/15/16 09:15  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 16:32	TCN	TAL IRV
Total/NA	Analysis	314.0		2			96749	08/25/16 13:43	BCB	TAL PHX

### Client Sample ID: EMW-6S-477-GW-150816

Date Collected: 08/15/16 09:20  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 16:58	TCN	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 05:19	BCB	TAL PHX

### Client Sample ID: EPA-MW9B-725-GW-150816

Date Collected: 08/15/16 09:50  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 17:24	TCN	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 05:42	BCB	TAL PHX

### Client Sample ID: EPA-MW9A-530-GW-150816

Date Collected: 08/15/16 10:05  
Date Received: 08/16/16 17:50

### Lab Sample ID: 440-155681-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 17:51	TCN	TAL IRV

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

**Client Sample ID: EPA-MW9A-530-GW-150816**

Date Collected: 08/15/16 10:05  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-12**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		1			96749	08/25/16 06:05	BCB	TAL PHX

**Client Sample ID: EPA-MW9A-530-GW-150816-D**

Date Collected: 08/15/16 10:10  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-13**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350806	08/21/16 18:17	TCN	TAL IRV
Total/NA	Analysis	314.0		10			96749	08/25/16 11:45	BCB	TAL PHX

**Client Sample ID: Rialto-2-990-GW-150816**

Date Collected: 08/15/16 11:00  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-14**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350886	08/22/16 16:00	RM	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 06:51	BCB	TAL PHX

**Client Sample ID: EMW-4C-690-GW-150816**

Date Collected: 08/15/16 12:20  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-15**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350886	08/22/16 16:26	RM	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 07:14	BCB	TAL PHX

**Client Sample ID: EMW-4B-605-GW-150816**

Date Collected: 08/15/16 12:30  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-16**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350886	08/22/16 16:52	RM	TAL IRV
Total/NA	Analysis	314.0		1			96749	08/25/16 08:43	BCB	TAL PHX

**Client Sample ID: EMW-4A-450-GW-150816**

Date Collected: 08/15/16 12:45  
Date Received: 08/16/16 17:50

**Lab Sample ID: 440-155681-17**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	350886	08/22/16 17:18	RM	TAL IRV
Total/NA	Analysis	314.0		10			96749	08/25/16 12:08	BCB	TAL PHX

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

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# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-350806/4**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			08/21/16 07:53	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 07:53	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 07:53	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 07:53	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 07:53	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 07:53	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 07:53	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 07:53	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 07:53	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 07:53	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/21/16 07:53	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/21/16 07:53	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Dibromomethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/21/16 07:53	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/21/16 07:53	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/21/16 07:53	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/21/16 07:53	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/21/16 07:53	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/21/16 07:53	1
2-Hexanone	ND		10	2.5	ug/L			08/21/16 07:53	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/21/16 07:53	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/21/16 07:53	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/21/16 07:53	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/21/16 07:53	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/21/16 07:53	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/21/16 07:53	1
Naphthalene	ND		5.0	0.40	ug/L			08/21/16 07:53	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/21/16 07:53	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/21/16 07:53	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-350806/4**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/21/16 07:53	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/21/16 07:53	1
Styrene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/21/16 07:53	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/21/16 07:53	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/21/16 07:53	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/21/16 07:53	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/21/16 07:53	1
Tetrachloroethene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
Toluene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/21/16 07:53	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/21/16 07:53	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/21/16 07:53	1
1,1,1-Trichloroethane	ND				1.0	0.25	ug/L			08/21/16 07:53	1
1,1,2-Trichloroethane	ND				1.0	0.25	ug/L			08/21/16 07:53	1
Trichloroethene	ND				1.0	0.25	ug/L			08/21/16 07:53	1
Trichlorofluoromethane	ND				1.0	0.25	ug/L			08/21/16 07:53	1
1,2,3-Trichloropropane	ND				2.0	0.40	ug/L			08/21/16 07:53	1
1,2,4-Trimethylbenzene	ND				2.0	0.25	ug/L			08/21/16 07:53	1
1,3,5-Trimethylbenzene	ND				2.0	0.25	ug/L			08/21/16 07:53	1
Vinyl chloride	ND				0.50	0.25	ug/L			08/21/16 07:53	1
Xylenes, Total	ND				2.0	0.50	ug/L			08/21/16 07:53	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	100		80 - 120				08/21/16 07:53	1
Dibromofluoromethane (Surr)	101		76 - 132				08/21/16 07:53	1
Toluene-d8 (Surr)	104		80 - 128				08/21/16 07:53	1

**Lab Sample ID: LCS 440-350806/5**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	27.0		ug/L		108	10 - 150
Benzene	25.0	23.7		ug/L		95	68 - 130
Bromobenzene	25.0	23.2		ug/L		93	70 - 130
Bromochloromethane	25.0	24.9		ug/L		100	70 - 130
Bromodichloromethane	25.0	25.5		ug/L		102	70 - 132
Bromoform	25.0	25.5		ug/L		102	60 - 148
Bromomethane	25.0	24.4		ug/L		97	64 - 139
2-Butanone (MEK)	25.0	23.8		ug/L		95	44 - 150
Carbon disulfide	25.0	23.1		ug/L		93	52 - 136
Carbon tetrachloride	25.0	25.2		ug/L		101	60 - 150
Chlorobenzene	25.0	23.3		ug/L		93	70 - 130
Chloroethane	25.0	25.7		ug/L		103	64 - 135

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350806/5**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	25.0	24.7		ug/L	99	70 - 130	
Chloromethane	25.0	25.3		ug/L	101	47 - 140	
2-Chlorotoluene	25.0	24.1		ug/L	96	70 - 130	
4-Chlorotoluene	25.0	24.5		ug/L	98	70 - 130	
cis-1,2-Dichloroethene	25.0	24.8		ug/L	99	70 - 133	
cis-1,3-Dichloropropene	25.0	25.8		ug/L	103	70 - 133	
Dibromochloromethane	25.0	25.0		ug/L	100	69 - 145	
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L	98	52 - 140	
1,2-Dibromoethane (EDB)	25.0	24.4		ug/L	98	70 - 130	
Dibromomethane	25.0	23.7		ug/L	95	70 - 130	
1,2-Dichlorobenzene	25.0	23.7		ug/L	95	70 - 130	
1,3-Dichlorobenzene	25.0	23.5		ug/L	94	70 - 130	
1,4-Dichlorobenzene	25.0	23.3		ug/L	93	70 - 130	
Dichlorodifluoromethane	25.0	25.9		ug/L	103	29 - 150	
1,1-Dichloroethane	25.0	24.7		ug/L	99	64 - 130	
1,2-Dichloroethane	25.0	25.7		ug/L	103	57 - 138	
1,1-Dichloroethene	25.0	23.7		ug/L	95	70 - 130	
1,2-Dichloropropene	25.0	25.0		ug/L	100	67 - 130	
1,3-Dichloropropene	25.0	24.2		ug/L	97	70 - 130	
2,2-Dichloropropene	25.0	25.7		ug/L	103	68 - 141	
1,1-Dichloropropene	25.0	25.4		ug/L	101	70 - 130	
Ethylbenzene	25.0	24.1		ug/L	96	70 - 130	
Ethyl-t-butyl ether (ETBE)	25.0	25.6		ug/L	102	60 - 136	
Hexachlorobutadiene	25.0	24.3		ug/L	97	10 - 150	
2-Hexanone	25.0	26.9		ug/L	108	10 - 150	
Isopropylbenzene	25.0	24.0		ug/L	96	70 - 136	
Isopropyl Ether (DIPE)	25.0	27.0		ug/L	108	58 - 139	
Methylene Chloride	25.0	24.4		ug/L	97	52 - 130	
4-Methyl-2-pentanone (MIBK)	25.0	26.8		ug/L	107	59 - 149	
Methyl-t-Butyl Ether (MTBE)	25.0	24.5		ug/L	98	63 - 131	
m,p-Xylene	25.0	24.2		ug/L	97	70 - 130	
Naphthalene	25.0	24.0		ug/L	96	60 - 140	
n-Butylbenzene	25.0	24.3		ug/L	97	65 - 150	
N-Propylbenzene	25.0	23.9		ug/L	95	67 - 139	
o-Xylene	25.0	23.9		ug/L	96	70 - 130	
p-Isopropyltoluene	25.0	23.5		ug/L	94	70 - 132	
sec-Butylbenzene	25.0	23.7		ug/L	95	70 - 138	
Styrene	25.0	23.8		ug/L	95	70 - 134	
Tert-amyl-methyl ether (TAME)	25.0	24.2		ug/L	97	57 - 139	
tert-Butyl alcohol (TBA)	250	251		ug/L	100	70 - 130	
tert-Butylbenzene	25.0	23.9		ug/L	95	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	22.8		ug/L	91	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L	91	63 - 130	
Tetrachloroethene	25.0	23.2		ug/L	93	70 - 130	
Toluene	25.0	24.3		ug/L	97	70 - 130	
trans-1,2-Dichloroethene	25.0	24.4		ug/L	97	70 - 130	
trans-1,3-Dichloropropene	25.0	25.5		ug/L	102	70 - 132	
1,2,3-Trichlorobenzene	25.0	23.7		ug/L	95	60 - 140	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350806/5**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	60 - 140
1,1,1-Trichloroethane	25.0	24.9		ug/L		99	70 - 130
1,1,2-Trichloroethane	25.0	24.1		ug/L		97	70 - 130
Trichloroethylene	25.0	24.5		ug/L		98	70 - 130
Trichlorofluoromethane	25.0	26.8		ug/L		107	60 - 150
1,2,3-Trichloropropane	25.0	23.2		ug/L		93	63 - 130
1,2,4-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 135
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	70 - 136
Vinyl chloride	25.0	25.0		ug/L		100	59 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		76 - 132
Toluene-d8 (Surr)	104		80 - 128

**Lab Sample ID: 440-155584-B-1 MS**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	23.8		ug/L		95	10 - 150
Benzene	ND		25.0	23.2		ug/L		93	66 - 130
Bromobenzene	ND		25.0	22.2		ug/L		89	70 - 130
Bromochloromethane	ND		25.0	23.3		ug/L		93	70 - 130
Bromodichloromethane	ND		25.0	24.4		ug/L		97	70 - 138
Bromoform	ND		25.0	23.9		ug/L		96	59 - 150
Bromomethane	ND		25.0	23.8		ug/L		95	62 - 131
2-Butanone (MEK)	ND		25.0	22.0		ug/L		88	48 - 140
Carbon disulfide	ND		25.0	22.8		ug/L		91	49 - 140
Carbon tetrachloride	ND		25.0	24.4		ug/L		98	60 - 150
Chlorobenzene	ND		25.0	22.3		ug/L		89	70 - 130
Chloroethane	ND		25.0	24.8		ug/L		99	68 - 130
Chloroform	ND		25.0	23.7		ug/L		95	70 - 130
Chloromethane	ND		25.0	24.8		ug/L		99	39 - 144
2-Chlorotoluene	ND		25.0	23.3		ug/L		93	70 - 130
4-Chlorotoluene	ND		25.0	23.5		ug/L		94	70 - 130
cis-1,2-Dichloroethene	0.29	J	25.0	24.0		ug/L		95	70 - 130
cis-1,3-Dichloropropene	ND		25.0	24.7		ug/L		99	70 - 133
Dibromochloromethane	ND		25.0	23.3		ug/L		93	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	22.5		ug/L		90	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	23.1		ug/L		92	70 - 131
Dibromomethane	ND		25.0	23.0		ug/L		92	70 - 130
1,2-Dichlorobenzene	ND		25.0	22.5		ug/L		90	70 - 130
1,3-Dichlorobenzene	ND		25.0	23.2		ug/L		93	70 - 130
1,4-Dichlorobenzene	ND		25.0	22.1		ug/L		89	70 - 130
Dichlorodifluoromethane	ND		25.0	24.9		ug/L		100	25 - 142
1,1-Dichloroethane	0.44	J	25.0	24.2		ug/L		95	65 - 130
1,2-Dichloroethane	ND		25.0	24.4		ug/L		98	56 - 146

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155584-B-1 MS**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethene	ND		25.0	22.6		ug/L		90	70 - 130
1,2-Dichloropropane	ND		25.0	23.8		ug/L		95	69 - 130
1,3-Dichloropropane	ND		25.0	23.2		ug/L		93	70 - 130
2,2-Dichloropropane	ND		25.0	27.4		ug/L		110	69 - 138
1,1-Dichloropropene	ND		25.0	24.4		ug/L		98	64 - 130
Ethylbenzene	ND		25.0	23.0		ug/L		92	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.2		ug/L		97	70 - 130
Hexachlorobutadiene	ND		25.0	24.3		ug/L		97	10 - 150
2-Hexanone	ND		25.0	23.0		ug/L		92	10 - 150
Isopropylbenzene	ND		25.0	23.3		ug/L		93	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	25.7		ug/L		103	64 - 138
Methylene Chloride	ND		25.0	23.1		ug/L		93	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.5		ug/L		98	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.1		ug/L		93	70 - 130
m,p-Xylene	ND		25.0	23.6		ug/L		94	70 - 133
Naphthalene	ND		25.0	22.8		ug/L		91	60 - 140
n-Butylbenzene	ND		25.0	24.7		ug/L		99	61 - 149
N-Propylbenzene	ND		25.0	23.8		ug/L		95	66 - 135
o-Xylene	ND		25.0	23.2		ug/L		93	70 - 133
p-Isopropyltoluene	ND		25.0	23.0		ug/L		92	70 - 130
sec-Butylbenzene	0.30	J	25.0	23.1		ug/L		91	67 - 134
Styrene	ND		25.0	22.8		ug/L		91	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	23.2		ug/L		93	68 - 133
tert-Butyl alcohol (TBA)	ND		250	212		ug/L		85	70 - 130
tert-Butylbenzene	ND		25.0	23.2		ug/L		93	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	21.7		ug/L		87	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	21.9		ug/L		87	63 - 130
Tetrachloroethene	ND		25.0	22.9		ug/L		92	70 - 137
Toluene	ND		25.0	23.4		ug/L		94	70 - 130
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	70 - 130
trans-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	23.1		ug/L		93	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	24.4		ug/L		98	60 - 140
1,1,1-Trichloroethane	0.52	J	25.0	25.4		ug/L		100	70 - 130
1,1,2-Trichloroethane	ND		25.0	24.0		ug/L		96	70 - 130
Trichloroethene	0.69	J	25.0	24.2		ug/L		94	70 - 130
Trichlorofluoromethane	ND		25.0	26.3		ug/L		105	60 - 150
1,2,3-Trichloropropane	ND		25.0	21.8		ug/L		87	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	23.5		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	23.7		ug/L		95	70 - 130
Vinyl chloride	ND		25.0	25.1		ug/L		100	50 - 137
<hr/>									
Surrogate		MS	MS						
Surrogate		%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)		98		80 - 120					
Dibromofluoromethane (Surr)		100		76 - 132					
Toluene-d8 (Surr)		103		80 - 128					

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155584-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Acetone	ND		25.0	26.1		ug/L		104	10 - 150	9	35	
Benzene	ND		25.0	22.7		ug/L		91	66 - 130	2	20	
Bromobenzene	ND		25.0	21.8		ug/L		87	70 - 130	2	20	
Bromochloromethane	ND		25.0	23.2		ug/L		93	70 - 130	0	25	
Bromodichloromethane	ND		25.0	23.4		ug/L		94	70 - 138	4	20	
Bromoform	ND		25.0	23.8		ug/L		95	59 - 150	0	25	
Bromomethane	ND		25.0	23.2		ug/L		93	62 - 131	3	25	
2-Butanone (MEK)	ND		25.0	24.8		ug/L		99	48 - 140	12	40	
Carbon disulfide	ND		25.0	21.9		ug/L		88	49 - 140	4	20	
Carbon tetrachloride	ND		25.0	24.0		ug/L		96	60 - 150	2	25	
Chlorobenzene	ND		25.0	21.6		ug/L		86	70 - 130	3	20	
Chloroethane	ND		25.0	23.9		ug/L		96	68 - 130	4	25	
Chloroform	ND		25.0	23.1		ug/L		92	70 - 130	3	20	
Chloromethane	ND		25.0	24.2		ug/L		97	39 - 144	3	25	
2-Chlorotoluene	ND		25.0	23.0		ug/L		92	70 - 130	2	20	
4-Chlorotoluene	ND		25.0	23.4		ug/L		94	70 - 130	0	20	
cis-1,2-Dichloroethene	0.29	J	25.0	23.4		ug/L		92	70 - 130	3	20	
cis-1,3-Dichloropropene	ND		25.0	23.9		ug/L		96	70 - 133	3	20	
Dibromochloromethane	ND		25.0	23.1		ug/L		92	70 - 148	1	25	
1,2-Dibromo-3-Chloropropane	ND		25.0	22.8		ug/L		91	48 - 140	1	30	
1,2-Dibromoethane (EDB)	ND		25.0	23.0		ug/L		92	70 - 131	0	25	
Dibromomethane	ND		25.0	22.3		ug/L		89	70 - 130	3	25	
1,2-Dichlorobenzene	ND		25.0	22.3		ug/L		89	70 - 130	1	20	
1,3-Dichlorobenzene	ND		25.0	22.2		ug/L		89	70 - 130	4	20	
1,4-Dichlorobenzene	ND		25.0	22.1		ug/L		88	70 - 130	0	20	
Dichlorodifluoromethane	ND		25.0	24.3		ug/L		97	25 - 142	3	30	
1,1-Dichloroethane	0.44	J	25.0	23.4		ug/L		92	65 - 130	3	20	
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	56 - 146	2	20	
1,1-Dichloroethene	ND		25.0	21.8		ug/L		87	70 - 130	3	20	
1,2-Dichloropropane	ND		25.0	23.6		ug/L		94	69 - 130	1	20	
1,3-Dichloropropane	ND		25.0	22.4		ug/L		89	70 - 130	4	25	
2,2-Dichloropropane	ND		25.0	26.3		ug/L		105	69 - 138	4	25	
1,1-Dichloropropene	ND		25.0	23.7		ug/L		95	64 - 130	3	20	
Ethylbenzene	ND		25.0	22.6		ug/L		90	70 - 130	2	20	
Ethyl-t-butyl ether (ETBE)	ND		25.0	23.9		ug/L		96	70 - 130	1	25	
Hexachlorobutadiene	ND		25.0	23.0		ug/L		92	10 - 150	5	20	
2-Hexanone	ND		25.0	24.8		ug/L		99	10 - 150	8	35	
Isopropylbenzene	ND		25.0	22.9		ug/L		92	70 - 132	2	20	
Isopropyl Ether (DIPE)	ND		25.0	25.2		ug/L		101	64 - 138	2	25	
Methylene Chloride	ND		25.0	22.7		ug/L		91	52 - 130	2	20	
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.0		ug/L		104	52 - 150	6	35	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.2		ug/L		93	70 - 130	0	25	
m,p-Xylene	ND		25.0	22.2		ug/L		89	70 - 133	6	25	
Naphthalene	ND		25.0	23.4		ug/L		94	60 - 140	3	30	
n-Butylbenzene	ND		25.0	23.8		ug/L		95	61 - 149	4	20	
N-Propylbenzene	ND		25.0	23.2		ug/L		93	66 - 135	3	20	
o-Xylene	ND		25.0	22.4		ug/L		90	70 - 133	4	20	
p-Isopropyltoluene	ND		25.0	22.4		ug/L		90	70 - 130	3	20	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155584-B-1 MSD**

**Matrix: Water**

**Analysis Batch: 350806**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	0.30	J	25.0	22.8		ug/L		90	67 - 134	1	20
Styrene	ND		25.0	22.1		ug/L		88	29 - 150	3	35
Tert-amyl-methyl ether (TAME)	ND		25.0	23.2		ug/L		93	68 - 133	0	30
tert-Butyl alcohol (TBA)	ND		250	215		ug/L		86	70 - 130	2	25
tert-Butylbenzene	ND		25.0	22.6		ug/L		91	70 - 130	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	21.0		ug/L		84	60 - 149	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.2		ug/L		89	63 - 130	2	30
Tetrachloroethene	ND		25.0	22.3		ug/L		89	70 - 137	3	20
Toluene	ND		25.0	22.6		ug/L		91	70 - 130	3	20
trans-1,2-Dichloroethene	ND		25.0	23.0		ug/L		92	70 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	23.6		ug/L		94	70 - 138	2	25
1,2,3-Trichlorobenzene	ND		25.0	23.0		ug/L		92	60 - 140	1	20
1,2,4-Trichlorobenzene	ND		25.0	23.9		ug/L		96	60 - 140	2	20
1,1,1-Trichloroethane	0.52	J	25.0	24.7		ug/L		97	70 - 130	3	20
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	70 - 130	1	25
Trichloroethene	0.69	J	25.0	23.6		ug/L		92	70 - 130	3	20
Trichlorofluoromethane	ND		25.0	25.4		ug/L		101	60 - 150	4	25
1,2,3-Trichloropropane	ND		25.0	22.0		ug/L		88	60 - 130	1	30
1,2,4-Trimethylbenzene	ND		25.0	22.5		ug/L		90	70 - 130	4	25
1,3,5-Trimethylbenzene	ND		25.0	23.0		ug/L		92	70 - 130	3	20
Vinyl chloride	ND		25.0	24.2		ug/L		97	50 - 137	3	30

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		76 - 132
Toluene-d8 (Surr)	100		80 - 128

**Lab Sample ID: MB 440-350815/5**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			08/21/16 11:00	1
Benzene	ND		0.50	0.25	ug/L			08/21/16 11:00	1
Bromobenzene	ND		1.0	0.25	ug/L			08/21/16 11:00	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/21/16 11:00	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/21/16 11:00	1
Bromoform	ND		1.0	0.40	ug/L			08/21/16 11:00	1
Bromomethane	ND		2.0	0.25	ug/L			08/21/16 11:00	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/21/16 11:00	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/21/16 11:00	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/21/16 11:00	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/21/16 11:00	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/21/16 11:00	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/21/16 11:00	1
Chloroethane	ND		1.0	0.40	ug/L			08/21/16 11:00	1
Chloroform	ND		1.0	0.25	ug/L			08/21/16 11:00	1
Chloromethane	ND		1.0	0.25	ug/L			08/21/16 11:00	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-350815/5**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
2-Chlorotoluene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
4-Chlorotoluene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
cis-1,2-Dichloroethene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
cis-1,3-Dichloropropene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Dibromochloromethane	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,2-Dibromo-3-Chloropropane	ND	ND			2.0	0.50	ug/L			08/21/16 11:00	1
1,2-Dibromoethane (EDB)	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Dibromomethane	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,2-Dichlorobenzene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,3-Dichlorobenzene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,4-Dichlorobenzene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Dichlorodifluoromethane	ND	ND			1.0	0.40	ug/L			08/21/16 11:00	1
1,1-Dichloroethane	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,2-Dichloroethane	ND	ND			0.50	0.25	ug/L			08/21/16 11:00	1
1,1-Dichloroethene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,2-Dichloropropene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,3-Dichloropropene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
2,2-Dichloropropene	ND	ND			1.0	0.40	ug/L			08/21/16 11:00	1
1,1-Dichloropropene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Ethylbenzene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Ethyl-t-butyl ether (ETBE)	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
Hexachlorobutadiene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
2-Hexanone	ND	ND			10	2.5	ug/L			08/21/16 11:00	1
Isopropylbenzene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Isopropyl Ether (DIPE)	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
Methylene Chloride	ND	ND			5.0	0.88	ug/L			08/21/16 11:00	1
4-Methyl-2-pentanone (MIBK)	ND	ND			10	2.5	ug/L			08/21/16 11:00	1
Methyl-t-Butyl Ether (MTBE)	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
m,p-Xylene	ND	ND			1.0	0.50	ug/L			08/21/16 11:00	1
Naphthalene	ND	ND			5.0	0.40	ug/L			08/21/16 11:00	1
n-Butylbenzene	ND	ND			2.0	0.40	ug/L			08/21/16 11:00	1
N-Propylbenzene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
o-Xylene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
p-Isopropyltoluene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
sec-Butylbenzene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
Styrene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Tert-amyl-methyl ether (TAME)	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
tert-Butyl alcohol (TBA)	ND	ND			10	5.0	ug/L			08/21/16 11:00	1
tert-Butylbenzene	ND	ND			2.0	0.25	ug/L			08/21/16 11:00	1
1,1,1,2-Tetrachloroethane	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,1,2,2-Tetrachloroethane	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Tetrachloroethene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
Toluene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
trans-1,4-Dichloro-2-butene	ND	ND			5.0	2.5	ug/L			08/21/16 11:00	1
trans-1,2-Dichloroethene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
trans-1,3-Dichloropropene	ND	ND			1.0	0.25	ug/L			08/21/16 11:00	1
1,2,3-Trichlorobenzene	ND	ND			2.0	0.40	ug/L			08/21/16 11:00	1
1,2,4-Trichlorobenzene	ND	ND			2.0	0.40	ug/L			08/21/16 11:00	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-350815/5**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND	ND									
1,1,1-Trichloroethane					1.0	0.25	ug/L			08/21/16 11:00	1
1,1,2-Trichloroethane					1.0	0.25	ug/L			08/21/16 11:00	1
Trichloroethene					1.0	0.25	ug/L			08/21/16 11:00	1
Trichlorofluoromethane					1.0	0.25	ug/L			08/21/16 11:00	1
1,2,3-Trichloropropane					2.0	0.40	ug/L			08/21/16 11:00	1
1,2,4-Trimethylbenzene					2.0	0.25	ug/L			08/21/16 11:00	1
1,3,5-Trimethylbenzene					2.0	0.25	ug/L			08/21/16 11:00	1
Vinyl chloride					0.50	0.25	ug/L			08/21/16 11:00	1
Xylenes, Total					2.0	0.50	ug/L			08/21/16 11:00	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	ND	ND						
4-Bromofluorobenzene (Surr)			97		80 - 120			1
Dibromofluoromethane (Surr)			103		76 - 132			1
Toluene-d8 (Surr)			107		80 - 128			1

**Lab Sample ID: LCS 440-350815/6**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCs	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	21.2		ug/L		85	10 - 150
Benzene	25.0	24.7		ug/L		99	68 - 130
Bromobenzene	25.0	25.6		ug/L		103	70 - 130
Bromochloromethane	25.0	25.8		ug/L		103	70 - 130
Bromodichloromethane	25.0	25.7		ug/L		103	70 - 132
Bromoform	25.0	24.2		ug/L		97	60 - 148
Bromomethane	25.0	24.9		ug/L		100	64 - 139
2-Butanone (MEK)	25.0	20.5		ug/L		82	44 - 150
Carbon disulfide	25.0	23.4		ug/L		94	52 - 136
Carbon tetrachloride	25.0	24.2		ug/L		97	60 - 150
Chlorobenzene	25.0	24.8		ug/L		99	70 - 130
Chloroethane	25.0	24.7		ug/L		99	64 - 135
Chloroform	25.0	25.4		ug/L		102	70 - 130
Chloromethane	25.0	23.4		ug/L		94	47 - 140
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130
4-Chlorotoluene	25.0	25.1		ug/L		101	70 - 130
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	70 - 133
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	70 - 133
Dibromochloromethane	25.0	25.2		ug/L		101	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	21.7		ug/L		87	52 - 140
1,2-Dibromoethane (EDB)	25.0	24.8		ug/L		99	70 - 130
Dibromomethane	25.0	25.5		ug/L		102	70 - 130
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	21.1		ug/L		84	29 - 150
1,1-Dichloroethane	25.0	24.3		ug/L		97	64 - 130
1,2-Dichloroethane	25.0	25.4		ug/L		101	57 - 138

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350815/6**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,1-Dichloroethene	25.0	23.4		ug/L		94	70 - 130
1,2-Dichloropropane	25.0	25.8		ug/L		103	67 - 130
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 130
2,2-Dichloropropane	25.0	24.2		ug/L		97	68 - 141
1,1-Dichloropropene	25.0	23.6		ug/L		94	70 - 130
Ethylbenzene	25.0	24.1		ug/L		96	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	25.8		ug/L		103	60 - 136
Hexachlorobutadiene	25.0	25.6		ug/L		102	10 - 150
2-Hexanone	25.0	22.3		ug/L		89	10 - 150
Isopropylbenzene	25.0	25.8		ug/L		103	70 - 136
Isopropyl Ether (DIPE)	25.0	26.8		ug/L		107	58 - 139
Methylene Chloride	25.0	25.7		ug/L		103	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	22.9		ug/L		92	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	24.1		ug/L		97	63 - 131
m,p-Xylene	25.0	25.4		ug/L		102	70 - 130
Naphthalene	25.0	26.4		ug/L		106	60 - 140
n-Butylbenzene	25.0	25.8		ug/L		103	65 - 150
N-Propylbenzene	25.0	25.7		ug/L		103	67 - 139
o-Xylene	25.0	25.5		ug/L		102	70 - 130
p-Isopropyltoluene	25.0	26.0		ug/L		104	70 - 132
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 138
Styrene	25.0	25.6		ug/L		102	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	24.2		ug/L		97	57 - 139
tert-Butyl alcohol (TBA)	250	272		ug/L		109	70 - 130
tert-Butylbenzene	25.0	25.5		ug/L		102	70 - 130
1,1,1,2-Tetrachloroethane	25.0	24.6		ug/L		98	60 - 141
1,1,2,2-Tetrachloroethane	25.0	21.8		ug/L		87	63 - 130
Tetrachloroethene	25.0	24.0		ug/L		96	70 - 130
Toluene	25.0	24.6		ug/L		98	70 - 130
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	70 - 132
1,2,3-Trichlorobenzene	25.0	27.7		ug/L		111	60 - 140
1,2,4-Trichlorobenzene	25.0	28.3		ug/L		113	60 - 140
1,1,1-Trichloroethane	25.0	23.2		ug/L		93	70 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 130
Trichloroethene	25.0	25.6		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	22.7		ug/L		91	60 - 150
1,2,3-Trichloropropane	25.0	21.9		ug/L		88	63 - 130
1,2,4-Trimethylbenzene	25.0	26.5		ug/L		106	70 - 135
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 136
Vinyl chloride	25.0	23.2		ug/L		93	59 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	104		76 - 132
Toluene-d8 (Surr)	99		80 - 128

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155681-7 MS**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	25.2		ug/L	101	10 - 150	
Benzene	ND		25.0	25.4		ug/L	102	66 - 130	
Bromobenzene	ND		25.0	26.3		ug/L	105	70 - 130	
Bromochloromethane	ND		25.0	26.0		ug/L	104	70 - 130	
Bromodichloromethane	ND		25.0	25.2		ug/L	101	70 - 138	
Bromoform	ND		25.0	24.5		ug/L	98	59 - 150	
Bromomethane	ND		25.0	26.3		ug/L	105	62 - 131	
2-Butanone (MEK)	ND		25.0	21.5		ug/L	86	48 - 140	
Carbon disulfide	ND		25.0	24.9		ug/L	99	49 - 140	
Carbon tetrachloride	ND		25.0	25.5		ug/L	102	60 - 150	
Chlorobenzene	ND		25.0	25.8		ug/L	103	70 - 130	
Chloroethane	ND		25.0	25.8		ug/L	103	68 - 130	
Chloroform	ND		25.0	25.5		ug/L	102	70 - 130	
Chloromethane	ND		25.0	24.7		ug/L	99	39 - 144	
2-Chlorotoluene	ND		25.0	26.6		ug/L	107	70 - 130	
4-Chlorotoluene	ND		25.0	27.0		ug/L	108	70 - 130	
cis-1,2-Dichloroethene	ND		25.0	25.7		ug/L	103	70 - 130	
cis-1,3-Dichloropropene	ND		25.0	26.6		ug/L	107	70 - 133	
Dibromochloromethane	ND		25.0	25.3		ug/L	101	70 - 148	
1,2-Dibromo-3-Chloropropane	ND		25.0	23.3		ug/L	93	48 - 140	
1,2-Dibromoethane (EDB)	ND		25.0	25.6		ug/L	102	70 - 131	
Dibromomethane	ND		25.0	25.3		ug/L	101	70 - 130	
1,2-Dichlorobenzene	ND		25.0	26.0		ug/L	104	70 - 130	
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L	105	70 - 130	
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L	105	70 - 130	
Dichlorodifluoromethane	ND		25.0	23.2		ug/L	93	25 - 142	
1,1-Dichloroethane	ND		25.0	25.0		ug/L	100	65 - 130	
1,2-Dichloroethane	0.73		25.0	25.9		ug/L	101	56 - 146	
1,1-Dichloroethene	ND		25.0	24.3		ug/L	97	70 - 130	
1,2-Dichloropropane	ND		25.0	25.8		ug/L	103	69 - 130	
1,3-Dichloropropane	ND		25.0	25.6		ug/L	102	70 - 130	
2,2-Dichloropropane	ND		25.0	26.6		ug/L	106	69 - 138	
1,1-Dichloropropene	ND		25.0	25.1		ug/L	100	64 - 130	
Ethylbenzene	1.2		25.0	26.8		ug/L	102	70 - 130	
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.2		ug/L	101	70 - 130	
Hexachlorobutadiene	ND		25.0	27.7		ug/L	111	10 - 150	
2-Hexanone	ND		25.0	22.3		ug/L	89	10 - 150	
Isopropylbenzene	ND		25.0	27.4		ug/L	110	70 - 132	
Isopropyl Ether (DIPE)	ND		25.0	26.3		ug/L	105	64 - 138	
Methylene Chloride	ND		25.0	25.7		ug/L	103	52 - 130	
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.9		ug/L	95	52 - 150	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.7		ug/L	95	70 - 130	
m,p-Xylene	0.61	J	25.0	27.4		ug/L	107	70 - 133	
Naphthalene	ND		25.0	28.5		ug/L	114	60 - 140	
n-Butylbenzene	ND		25.0	27.8		ug/L	111	61 - 149	
N-Propylbenzene	ND		25.0	27.7		ug/L	111	66 - 135	
o-Xylene	0.77	J	25.0	27.1		ug/L	106	70 - 133	
p-Isopropyltoluene	ND		25.0	27.7		ug/L	111	70 - 130	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155681-7 MS**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	ND		25.0	27.3		ug/L		109	67 - 134		
Styrene	ND		25.0	26.2		ug/L		105	29 - 150		
Tert-amyl-methyl ether (TAME)	ND		25.0	23.5		ug/L		94	68 - 133		
tert-Butyl alcohol (TBA)	ND		250	275		ug/L		110	70 - 130		
tert-Butylbenzene	ND		25.0	27.1		ug/L		109	70 - 130		
1,1,1,2-Tetrachloroethane	ND		25.0	24.8		ug/L		99	60 - 149		
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	63 - 130		
Tetrachloroethene	ND		25.0	26.2		ug/L		105	70 - 137		
Toluene	20		25.0	44.5		ug/L		96	70 - 130		
trans-1,2-Dichloroethene	ND		25.0	26.6		ug/L		106	70 - 130		
trans-1,3-Dichloropropene	ND		25.0	25.9		ug/L		104	70 - 138		
1,2,3-Trichlorobenzene	ND		25.0	28.9		ug/L		115	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	29.4		ug/L		117	60 - 140		
1,1,1-Trichloroethane	ND		25.0	24.4		ug/L		97	70 - 130		
1,1,2-Trichloroethane	ND		25.0	25.0		ug/L		100	70 - 130		
Trichloroethene	6.0		25.0	32.1		ug/L		105	70 - 130		
Trichlorofluoromethane	ND		25.0	24.4		ug/L		97	60 - 150		
1,2,3-Trichloropropane	ND		25.0	23.2		ug/L		93	60 - 130		
1,2,4-Trimethylbenzene	ND		25.0	27.3		ug/L		109	70 - 130		
1,3,5-Trimethylbenzene	ND		25.0	27.3		ug/L		109	70 - 130		
Vinyl chloride	ND		25.0	25.0		ug/L		100	50 - 137		
<b>MS MS</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>MS</b>	<b>MS</b>						
4-Bromofluorobenzene (Surr)	98			80 - 120							
Dibromofluoromethane (Surr)	99			76 - 132							
Toluene-d8 (Surr)	102			80 - 128							

**Lab Sample ID: 440-155681-7 MSD**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Acetone	ND		25.0	28.2		ug/L		113	10 - 150	11	35
Benzene	ND		25.0	24.9		ug/L		100	66 - 130	2	20
Bromobenzene	ND		25.0	26.2		ug/L		105	70 - 130	1	20
Bromochloromethane	ND		25.0	26.4		ug/L		105	70 - 130	1	25
Bromodichloromethane	ND		25.0	25.6		ug/L		102	70 - 138	1	20
Bromoform	ND		25.0	24.4		ug/L		98	59 - 150	0	25
Bromomethane	ND		25.0	24.9		ug/L		100	62 - 131	6	25
2-Butanone (MEK)	ND		25.0	27.1		ug/L		108	48 - 140	23	40
Carbon disulfide	ND		25.0	23.9		ug/L		96	49 - 140	4	20
Carbon tetrachloride	ND		25.0	24.8		ug/L		99	60 - 150	3	25
Chlorobenzene	ND		25.0	25.0		ug/L		100	70 - 130	3	20
Chloroethane	ND		25.0	24.5		ug/L		98	68 - 130	5	25
Chloroform	ND		25.0	25.1		ug/L		100	70 - 130	2	20
Chloromethane	ND		25.0	23.9		ug/L		95	39 - 144	3	25
2-Chlorotoluene	ND		25.0	26.0		ug/L		104	70 - 130	3	20
4-Chlorotoluene	ND		25.0	26.1		ug/L		105	70 - 130	3	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155681-7 MSD**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
cis-1,2-Dichloroethene	ND		25.0	25.6		ug/L		103	70 - 130	0	20	
cis-1,3-Dichloropropene	ND		25.0	26.3		ug/L		105	70 - 133	1	20	
Dibromochloromethane	ND		25.0	25.0		ug/L		100	70 - 148	1	25	
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		94	48 - 140	1	30	
1,2-Dibromoethane (EDB)	ND		25.0	25.3		ug/L		101	70 - 131	1	25	
Dibromomethane	ND		25.0	24.7		ug/L		99	70 - 130	2	25	
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L		101	70 - 130	3	20	
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		102	70 - 130	3	20	
1,4-Dichlorobenzene	ND		25.0	25.8		ug/L		103	70 - 130	2	20	
Dichlorodifluoromethane	ND		25.0	22.7		ug/L		91	25 - 142	2	30	
1,1-Dichloroethane	ND		25.0	24.7		ug/L		99	65 - 130	1	20	
1,2-Dichloroethane	0.73		25.0	25.4		ug/L		99	56 - 146	2	20	
1,1-Dichloroethene	ND		25.0	23.7		ug/L		95	70 - 130	3	20	
1,2-Dichloropropane	ND		25.0	25.4		ug/L		101	69 - 130	2	20	
1,3-Dichloropropane	ND		25.0	25.1		ug/L		100	70 - 130	2	25	
2,2-Dichloropropane	ND		25.0	25.8		ug/L		103	69 - 138	3	25	
1,1-Dichloropropene	ND		25.0	24.3		ug/L		97	64 - 130	3	20	
Ethylbenzene	1.2		25.0	26.0		ug/L		99	70 - 130	3	20	
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.3		ug/L		101	70 - 130	1	25	
Hexachlorobutadiene	ND		25.0	26.8		ug/L		107	10 - 150	3	20	
2-Hexanone	ND		25.0	23.4		ug/L		93	10 - 150	5	35	
Isopropylbenzene	ND		25.0	26.5		ug/L		106	70 - 132	3	20	
Isopropyl Ether (DIPE)	ND		25.0	25.9		ug/L		103	64 - 138	2	25	
Methylene Chloride	ND		25.0	25.2		ug/L		101	52 - 130	2	20	
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.7		ug/L		99	52 - 150	4	35	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.2		ug/L		97	70 - 130	2	25	
m,p-Xylene	0.61	J	25.0	26.5		ug/L		103	70 - 133	3	25	
Naphthalene	ND		25.0	28.5		ug/L		114	60 - 140	0	30	
n-Butylbenzene	ND		25.0	26.8		ug/L		107	61 - 149	4	20	
N-Propylbenzene	ND		25.0	26.7		ug/L		107	66 - 135	4	20	
o-Xylene	0.77	J	25.0	26.4		ug/L		103	70 - 133	3	20	
p-Isopropyltoluene	ND		25.0	26.6		ug/L		106	70 - 130	4	20	
sec-Butylbenzene	ND		25.0	26.5		ug/L		106	67 - 134	3	20	
Styrene	ND		25.0	25.4		ug/L		102	29 - 150	3	35	
Tert-amyl-methyl ether (TAME)	ND		25.0	23.9		ug/L		96	68 - 133	2	30	
tert-Butyl alcohol (TBA)	ND		250	275		ug/L		110	70 - 130	0	25	
tert-Butylbenzene	ND		25.0	26.3		ug/L		105	70 - 130	3	20	
1,1,1,2-Tetrachloroethane	ND		25.0	24.2		ug/L		97	60 - 149	3	20	
1,1,2,2-Tetrachloroethane	ND		25.0	23.4		ug/L		93	63 - 130	1	30	
Tetrachloroethene	ND		25.0	25.1		ug/L		101	70 - 137	4	20	
Toluene	20		25.0	42.8		ug/L		89	70 - 130	4	20	
trans-1,2-Dichloroethene	ND		25.0	26.1		ug/L		104	70 - 130	2	20	
trans-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	70 - 138	2	25	
1,2,3-Trichlorobenzene	ND		25.0	27.9		ug/L		112	60 - 140	3	20	
1,2,4-Trichlorobenzene	ND		25.0	28.6		ug/L		114	60 - 140	3	20	
1,1,1-Trichloroethane	ND		25.0	24.3		ug/L		97	70 - 130	0	20	
1,1,2-Trichloroethane	ND		25.0	24.1		ug/L		96	70 - 130	3	25	
Trichloroethene	6.0		25.0	30.9		ug/L		100	70 - 130	4	20	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155681-7 MSD**

**Matrix: Water**

**Analysis Batch: 350815**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Trichlorofluoromethane	ND		25.0	23.6		ug/L		94	60 - 150	3	25
1,2,3-Trichloropropane	ND		25.0	22.8		ug/L		91	60 - 130	2	30
1,2,4-Trimethylbenzene	ND		25.0	26.4		ug/L		105	70 - 130	4	25
1,3,5-Trimethylbenzene	ND		25.0	26.4		ug/L		106	70 - 130	3	20
Vinyl chloride	ND		25.0	24.2		ug/L		97	50 - 137	4	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	102		76 - 132
Toluene-d8 (Surr)	100		80 - 128

**Lab Sample ID: MB 440-350886/4**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Acetone	ND			20	10	ug/L		08/22/16 08:25	1
Benzene	ND			0.50	0.25	ug/L		08/22/16 08:25	1
Bromobenzene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Bromoform	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Bromochloromethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Bromodichloromethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Bromomethane	ND			1.0	0.40	ug/L		08/22/16 08:25	1
1,3-Butadiene	ND			2.0	0.25	ug/L		08/22/16 08:25	1
2-Butanone (MEK)	ND			1.0	0.50	ug/L		08/22/16 08:25	1
Carbon disulfide	ND			10	2.5	ug/L		08/22/16 08:25	1
Carbon tetrachloride	ND			2.0	0.50	ug/L		08/22/16 08:25	1
Chlorobenzene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
2-Chloro-1,3-butadiene	ND			2.0	0.50	ug/L		08/22/16 08:25	1
Chloroethane	ND			1.0	0.40	ug/L		08/22/16 08:25	1
Chloroform	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Chloromethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
2-Chlorotoluene	ND			2.0	0.25	ug/L		08/22/16 08:25	1
4-Chlorotoluene	ND			2.0	0.25	ug/L		08/22/16 08:25	1
cis-1,2-Dichloroethene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
cis-1,3-Dichloropropene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Dibromochloromethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,2-Dibromo-3-Chloropropane	ND			2.0	0.50	ug/L		08/22/16 08:25	1
1,2-Dibromoethane (EDB)	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Dibromomethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,2-Dichlorobenzene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,3-Dichlorobenzene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,4-Dichlorobenzene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
Dichlorodifluoromethane	ND			1.0	0.40	ug/L		08/22/16 08:25	1
1,1-Dichloroethane	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,2-Dichloroethane	ND			0.50	0.25	ug/L		08/22/16 08:25	1
1,1-Dichloroethene	ND			1.0	0.25	ug/L		08/22/16 08:25	1
1,2-Dichloropropane	ND			1.0	0.25	ug/L		08/22/16 08:25	1

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# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-350886/4**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	MB	MB									
1,3-Dichloropropane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
2,2-Dichloropropane	ND				1.0	0.40	ug/L			08/22/16 08:25	1
1,1-Dichloropropene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Ethylbenzene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Ethyl-t-butyl ether (ETBE)	ND				2.0	0.25	ug/L			08/22/16 08:25	1
Hexachlorobutadiene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
2-Hexanone	ND				10	2.5	ug/L			08/22/16 08:25	1
Isopropylbenzene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Isopropyl Ether (DIPE)	ND				2.0	0.25	ug/L			08/22/16 08:25	1
Methylene Chloride	ND				5.0	0.88	ug/L			08/22/16 08:25	1
4-Methyl-2-pentanone (MIBK)	ND				10	2.5	ug/L			08/22/16 08:25	1
Methyl-t-Butyl Ether (MTBE)	ND				1.0	0.25	ug/L			08/22/16 08:25	1
m,p-Xylene	ND				1.0	0.50	ug/L			08/22/16 08:25	1
Naphthalene	ND				5.0	0.40	ug/L			08/22/16 08:25	1
n-Butylbenzene	ND				2.0	0.40	ug/L			08/22/16 08:25	1
N-Propylbenzene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
o-Xylene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
Styrene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/22/16 08:25	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/22/16 08:25	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Tetrachloroethene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Toluene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/22/16 08:25	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/22/16 08:25	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/22/16 08:25	1
1,1,1-Trichloroethane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
1,1,2-Trichloroethane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Trichloroethene	ND				1.0	0.25	ug/L			08/22/16 08:25	1
Trichlorofluoromethane	ND				1.0	0.25	ug/L			08/22/16 08:25	1
1,2,3-Trichloropropane	ND				2.0	0.40	ug/L			08/22/16 08:25	1
1,2,4-Trimethylbenzene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
1,3,5-Trimethylbenzene	ND				2.0	0.25	ug/L			08/22/16 08:25	1
Vinyl chloride	ND				0.50	0.25	ug/L			08/22/16 08:25	1
Xylenes, Total	ND				2.0	0.50	ug/L			08/22/16 08:25	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	MB	MB						
4-Bromofluorobenzene (Surr)	99		99		80 - 120		08/22/16 08:25	1
Dibromofluoromethane (Surr)	100		100		76 - 132		08/22/16 08:25	1
Toluene-d8 (Surr)	104		104		80 - 128		08/22/16 08:25	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350886/5**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Acetone	25.0	26.3		ug/L		105	105	10 - 150
Benzene	25.0	24.5		ug/L		98	98	68 - 130
Bromobenzene	25.0	23.7		ug/L		95	95	70 - 130
Bromochloromethane	25.0	24.9		ug/L		100	100	70 - 130
Bromodichloromethane	25.0	25.8		ug/L		103	103	70 - 132
Bromoform	25.0	26.0		ug/L		104	104	60 - 148
Bromomethane	25.0	25.4		ug/L		101	101	64 - 139
2-Butanone (MEK)	25.0	24.9		ug/L		99	99	44 - 150
Carbon disulfide	25.0	24.7		ug/L		99	99	52 - 136
Carbon tetrachloride	25.0	26.3		ug/L		105	105	60 - 150
Chlorobenzene	25.0	23.9		ug/L		96	96	70 - 130
Chloroethane	25.0	26.9		ug/L		107	107	64 - 135
Chloroform	25.0	25.2		ug/L		101	101	70 - 130
Chloromethane	25.0	25.7		ug/L		103	103	47 - 140
2-Chlorotoluene	25.0	25.2		ug/L		101	101	70 - 130
4-Chlorotoluene	25.0	25.5		ug/L		102	102	70 - 130
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	101	70 - 133
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	106	70 - 133
Dibromochloromethane	25.0	25.2		ug/L		101	101	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	98	52 - 140
1,2-Dibromoethane (EDB)	25.0	24.5		ug/L		98	98	70 - 130
Dibromomethane	25.0	24.3		ug/L		97	97	70 - 130
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	97	70 - 130
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	99	70 - 130
1,4-Dichlorobenzene	25.0	24.4		ug/L		97	97	70 - 130
Dichlorodifluoromethane	25.0	26.7		ug/L		107	107	29 - 150
1,1-Dichloroethane	25.0	25.3		ug/L		101	101	64 - 130
1,2-Dichloroethane	25.0	26.6		ug/L		107	107	57 - 138
1,1-Dichloroethene	25.0	24.4		ug/L		98	98	70 - 130
1,2-Dichloropropane	25.0	25.6		ug/L		102	102	67 - 130
1,3-Dichloropropane	25.0	24.3		ug/L		97	97	70 - 130
2,2-Dichloropropane	25.0	28.4		ug/L		114	114	68 - 141
1,1-Dichloropropene	25.0	26.4		ug/L		105	105	70 - 130
Ethylbenzene	25.0	24.8		ug/L		99	99	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	26.2		ug/L		105	105	60 - 136
Hexachlorobutadiene	25.0	25.5		ug/L		102	102	10 - 150
2-Hexanone	25.0	26.1		ug/L		104	104	10 - 150
Isopropylbenzene	25.0	25.4		ug/L		102	102	70 - 136
Isopropyl Ether (DIPE)	25.0	27.7		ug/L		111	111	58 - 139
Methylene Chloride	25.0	24.7		ug/L		99	99	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	26.9		ug/L		107	107	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	24.8		ug/L		99	99	63 - 131
m,p-Xylene	25.0	25.3		ug/L		101	101	70 - 130
Naphthalene	25.0	24.5		ug/L		98	98	60 - 140
n-Butylbenzene	25.0	25.6		ug/L		102	102	65 - 150
N-Propylbenzene	25.0	25.1		ug/L		101	101	67 - 139
o-Xylene	25.0	24.5		ug/L		98	98	70 - 130
p-Isopropyltoluene	25.0	24.5		ug/L		98	98	70 - 132

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-350886/5**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
sec-Butylbenzene	25.0	24.9		ug/L		100	70 - 138	
Styrene	25.0	24.7		ug/L		99	70 - 134	
Tert-amyl-methyl ether (TAME)	25.0	25.3		ug/L		101	57 - 139	
tert-Butyl alcohol (TBA)	250	251		ug/L		100	70 - 130	
tert-Butylbenzene	25.0	24.4		ug/L		98	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	23.6		ug/L		94	60 - 141	
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	63 - 130	
Tetrachloroethene	25.0	24.0		ug/L		96	70 - 130	
Toluene	25.0	24.4		ug/L		98	70 - 130	
trans-1,2-Dichloroethene	25.0	25.4		ug/L		101	70 - 130	
trans-1,3-Dichloropropene	25.0	26.2		ug/L		105	70 - 132	
1,2,3-Trichlorobenzene	25.0	24.5		ug/L		98	60 - 140	
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	60 - 140	
1,1,1-Trichloroethane	25.0	26.5		ug/L		106	70 - 130	
1,1,2-Trichloroethane	25.0	24.5		ug/L		98	70 - 130	
Trichloroethene	25.0	25.0		ug/L		100	70 - 130	
Trichlorofluoromethane	25.0	28.1		ug/L		112	60 - 150	
1,2,3-Trichloropropane	25.0	23.4		ug/L		94	63 - 130	
1,2,4-Trimethylbenzene	25.0	25.0		ug/L		100	70 - 135	
1,3,5-Trimethylbenzene	25.0	25.1		ug/L		101	70 - 136	
Vinyl chloride	25.0	26.6		ug/L		107	59 - 133	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		76 - 132
Toluene-d8 (Surr)	102		80 - 128

**Lab Sample ID: LCSD 440-350886/6**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike	LCSD		Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Acetone	25.0	24.7		ug/L		99	10 - 150	6	30
Benzene	25.0	23.5		ug/L		94	68 - 130	4	20
Bromobenzene	25.0	23.6		ug/L		94	70 - 130	1	20
Bromoform	25.0	23.8		ug/L		95	70 - 130	5	20
Bromochloromethane	25.0	24.9		ug/L		100	70 - 132	3	20
Bromodichloromethane	25.0	25.9		ug/L		104	60 - 148	0	25
Bromoform	25.0	24.4		ug/L		98	64 - 139	4	20
Bromomethane	25.0	23.2		ug/L		93	44 - 150	7	35
2-Butanone (MEK)	25.0	23.2		ug/L		93	52 - 136	6	20
Carbon disulfide	25.0	25.3		ug/L		101	60 - 150	4	25
Carbon tetrachloride	25.0	23.3		ug/L		93	70 - 130	2	20
Chlorobenzene	25.0	25.8		ug/L		103	64 - 135	4	20
Chloroethane	25.0	24.4		ug/L		97	70 - 130	3	20
Chloroform	25.0	24.9		ug/L		99	47 - 140	0	20
Chloromethane	25.0	25.3		ug/L		101	70 - 130	2	20
2-Chlorotoluene	25.0	25.0		ug/L		100	70 - 130	2	20
4-Chlorotoluene									

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 440-350886/6**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD
	Added	Result	Qualifier						
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	70 - 133	3	20
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	70 - 133	1	25
Dibromochloromethane	25.0	24.9		ug/L		100	69 - 145	1	20
1,2-Dibromo-3-Chloropropane	25.0	24.2		ug/L		97	52 - 140	1	30
1,2-Dibromoethane (EDB)	25.0	24.2		ug/L		97	70 - 130	1	20
Dibromomethane	25.0	23.4		ug/L		94	70 - 130	4	20
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	2	20
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	0	20
Dichlorodifluoromethane	25.0	25.4		ug/L		102	29 - 150	5	30
1,1-Dichloroethane	25.0	24.3		ug/L		97	64 - 130	4	20
1,2-Dichloroethane	25.0	25.1		ug/L		100	57 - 138	6	20
1,1-Dichloroethene	25.0	23.3		ug/L		93	70 - 130	4	20
1,2-Dichloropropane	25.0	24.6		ug/L		98	67 - 130	4	20
1,3-Dichloropropane	25.0	24.2		ug/L		97	70 - 130	1	20
2,2-Dichloropropane	25.0	27.0		ug/L		108	68 - 141	5	25
1,1-Dichloropropene	25.0	25.6		ug/L		103	70 - 130	3	20
Ethylbenzene	25.0	25.1		ug/L		100	70 - 130	1	20
Ethyl-t-butyl ether (ETBE)	25.0	24.8		ug/L		99	60 - 136	5	20
Hexachlorobutadiene	25.0	25.3		ug/L		101	10 - 150	1	20
2-Hexanone	25.0	26.3		ug/L		105	10 - 150	1	30
Isopropylbenzene	25.0	25.1		ug/L		100	70 - 136	1	20
Isopropyl Ether (DIPE)	25.0	26.5		ug/L		106	58 - 139	4	20
Methylene Chloride	25.0	23.7		ug/L		95	52 - 130	4	20
4-Methyl-2-pentanone (MIBK)	25.0	26.7		ug/L		107	59 - 149	1	30
Methyl-t-Butyl Ether (MTBE)	25.0	23.6		ug/L		94	63 - 131	5	25
m,p-Xylene	25.0	25.2		ug/L		101	70 - 130	0	20
Naphthalene	25.0	24.3		ug/L		97	60 - 140	1	25
n-Butylbenzene	25.0	25.8		ug/L		103	65 - 150	1	20
N-Propylbenzene	25.0	25.4		ug/L		102	67 - 139	1	20
o-Xylene	25.0	24.9		ug/L		100	70 - 130	2	20
p-Isopropyltoluene	25.0	24.6		ug/L		98	70 - 132	1	20
sec-Butylbenzene	25.0	24.8		ug/L		99	70 - 138	1	20
Styrene	25.0	24.3		ug/L		97	70 - 134	2	20
Tert-amyl-methyl ether (TAME)	25.0	24.1		ug/L		96	57 - 139	5	25
tert-Butyl alcohol (TBA)	250	245		ug/L		98	70 - 130	2	20
tert-Butylbenzene	25.0	24.9		ug/L		99	70 - 130	2	20
1,1,1,2-Tetrachloroethane	25.0	23.1		ug/L		92	60 - 141	2	20
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	63 - 130	0	25
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 130	1	20
Toluene	25.0	24.6		ug/L		98	70 - 130	1	20
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130	5	20
trans-1,3-Dichloropropene	25.0	25.5		ug/L		102	70 - 132	3	20
1,2,3-Trichlorobenzene	25.0	24.2		ug/L		97	60 - 140	1	20
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	60 - 140	1	20
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130	4	20
1,1,2-Trichloroethane	25.0	24.1		ug/L		96	70 - 130	1	20
Trichloroethene	25.0	23.9		ug/L		96	70 - 130	4	20

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 440-350886/6**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD		Unit	D	%Rec.		RPD	RPD Limit
		Result	Qualifier			%Rec.	Limits		
Trichlorofluoromethane	25.0	26.9		ug/L		108	60 - 150	4	20
1,2,3-Trichloropropane	25.0	23.3		ug/L		93	63 - 130	1	20
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 135	1	20
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	70 - 136	0	20
Vinyl chloride	25.0	25.3		ug/L		101	59 - 133	5	30

Surrogate	LCSD		Limits
	LCSD	%Recovery	Qualifier
4-Bromofluorobenzene (Surrogate)	98		80 - 120
Dibromofluoromethane (Surrogate)	97		76 - 132
Toluene-d8 (Surrogate)	104		80 - 128

**Lab Sample ID: 550-68394-A-1 MS**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec.	
	Result	Qualifier	Added	Result	Qualifier			%Rec.	Limits
Acetone	ND	F1	25.0	40.5	F1	ug/L		162	10 - 150
Benzene	ND		25.0	24.1		ug/L		96	66 - 130
Bromobenzene	ND		25.0	23.5		ug/L		94	70 - 130
Bromochloromethane	0.33	J	25.0	25.0		ug/L		99	70 - 130
Bromodichloromethane	5.1		25.0	31.7		ug/L		106	70 - 138
Bromoform	3.3		25.0	30.7		ug/L		109	59 - 150
Bromomethane	ND		25.0	24.7		ug/L		99	62 - 131
2-Butanone (MEK)	ND		25.0	25.4		ug/L		102	48 - 140
Carbon disulfide	ND		25.0	23.9		ug/L		95	49 - 140
Carbon tetrachloride	ND		25.0	25.7		ug/L		103	60 - 150
Chlorobenzene	ND		25.0	23.3		ug/L		93	70 - 130
Chloroethane	ND		25.0	25.9		ug/L		104	68 - 130
Chloroform	3.3		25.0	28.4		ug/L		100	70 - 130
Chloromethane	ND		25.0	25.4		ug/L		102	39 - 144
2-Chlorotoluene	ND		25.0	24.8		ug/L		99	70 - 130
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	70 - 130
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	70 - 130
cis-1,3-Dichloropropene	ND		25.0	25.5		ug/L		102	70 - 133
Dibromochloromethane	8.0		25.0	33.8		ug/L		103	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	25.7		ug/L		103	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	24.8		ug/L		99	70 - 131
Dibromomethane	ND		25.0	25.1		ug/L		101	70 - 130
1,2-Dichlorobenzene	ND		25.0	23.7		ug/L		95	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	70 - 130
1,4-Dichlorobenzene	ND		25.0	24.1		ug/L		96	70 - 130
Dichlorodifluoromethane	ND		25.0	25.8		ug/L		103	25 - 142
1,1-Dichloroethane	ND		25.0	25.0		ug/L		100	65 - 130
1,2-Dichloroethane	ND		25.0	26.4		ug/L		105	56 - 146
1,1-Dichloroethene	ND		25.0	24.0		ug/L		96	70 - 130
1,2-Dichloropropane	ND		25.0	25.3		ug/L		101	69 - 130
1,3-Dichloropropane	ND		25.0	24.4		ug/L		98	70 - 130
2,2-Dichloropropane	ND		25.0	28.5		ug/L		114	69 - 138

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-68394-A-1 MS**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
1,1-Dichloropropene	ND		25.0	25.8		ug/L		103	64 - 130		
Ethylbenzene	ND		25.0	24.2		ug/L		97	70 - 130		
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.8		ug/L		103	70 - 130		
Hexachlorobutadiene	ND		25.0	24.9		ug/L		100	10 - 150		
2-Hexanone	ND		25.0	27.7		ug/L		111	10 - 150		
Isopropylbenzene	ND		25.0	24.4		ug/L		98	70 - 132		
Isopropyl Ether (DIPE)	ND		25.0	27.2		ug/L		109	64 - 138		
Methylene Chloride	1.6	J	25.0	26.4		ug/L		99	52 - 130		
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.5		ug/L		110	52 - 150		
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.4		ug/L		102	70 - 130		
m,p-Xylene	ND		25.0	24.1		ug/L		97	70 - 133		
Naphthalene	ND		25.0	25.9		ug/L		104	60 - 140		
n-Butylbenzene	ND		25.0	25.2		ug/L		101	61 - 149		
N-Propylbenzene	ND		25.0	24.6		ug/L		98	66 - 135		
o-Xylene	ND		25.0	24.3		ug/L		97	70 - 133		
p-Isopropyltoluene	ND		25.0	24.1		ug/L		96	70 - 130		
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	67 - 134		
Styrene	ND		25.0	24.5		ug/L		98	29 - 150		
Tert-amyl-methyl ether (TAME)	ND		25.0	25.2		ug/L		101	68 - 133		
tert-Butyl alcohol (TBA)	ND		250	247		ug/L		99	70 - 130		
tert-Butylbenzene	ND		25.0	24.1		ug/L		96	70 - 130		
1,1,1,2-Tetrachloroethane	ND		25.0	22.9		ug/L		92	60 - 149		
1,1,2,2-Tetrachloroethane	ND		25.0	24.0		ug/L		96	63 - 130		
Tetrachloroethene	ND		25.0	23.5		ug/L		94	70 - 137		
Toluene	ND		25.0	24.0		ug/L		96	70 - 130		
trans-1,2-Dichloroethene	ND		25.0	24.8		ug/L		99	70 - 130		
trans-1,3-Dichloropropene	ND		25.0	25.5		ug/L		102	70 - 138		
1,2,3-Trichlorobenzene	ND		25.0	25.1		ug/L		100	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	25.8		ug/L		103	60 - 140		
1,1,1-Trichloroethane	ND		25.0	26.0		ug/L		104	70 - 130		
1,1,2-Trichloroethane	ND		25.0	24.0		ug/L		96	70 - 130		
Trichloroethene	ND		25.0	25.1		ug/L		100	70 - 130		
Trichlorofluoromethane	ND		25.0	27.4		ug/L		110	60 - 150		
1,2,3-Trichloropropane	ND		25.0	23.8		ug/L		95	60 - 130		
1,2,4-Trimethylbenzene	ND		25.0	24.4		ug/L		98	70 - 130		
1,3,5-Trimethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130		
Vinyl chloride	ND		25.0	25.6		ug/L		102	50 - 137		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		76 - 132
Toluene-d8 (Surr)	100		80 - 128

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-68394-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Acetone	ND	F1	25.0	40.8	F1	ug/L	163	10 - 150	10 - 150	1	35	
Benzene	ND		25.0	23.6		ug/L	95	66 - 130	66 - 130	2	20	
Bromobenzene	ND		25.0	24.1		ug/L	96	70 - 130	70 - 130	2	20	
Bromochloromethane	0.33	J	25.0	25.1		ug/L	99	70 - 130	70 - 130	0	25	
Bromodichloromethane	5.1		25.0	30.9		ug/L	103	70 - 138	70 - 138	3	20	
Bromoform	3.3		25.0	29.4		ug/L	104	59 - 150	59 - 150	4	25	
Bromomethane	ND		25.0	23.9		ug/L	95	62 - 131	62 - 131	4	25	
2-Butanone (MEK)	ND		25.0	25.5		ug/L	102	48 - 140	48 - 140	0	40	
Carbon disulfide	ND		25.0	22.7		ug/L	91	49 - 140	49 - 140	5	20	
Carbon tetrachloride	ND		25.0	24.9		ug/L	99	60 - 150	60 - 150	3	25	
Chlorobenzene	ND		25.0	22.4		ug/L	90	70 - 130	70 - 130	4	20	
Chloroethane	ND		25.0	24.9		ug/L	100	68 - 130	68 - 130	4	25	
Chloroform	3.3		25.0	28.1		ug/L	99	70 - 130	70 - 130	1	20	
Chloromethane	ND		25.0	24.5		ug/L	98	39 - 144	39 - 144	4	25	
2-Chlorotoluene	ND		25.0	24.7		ug/L	99	70 - 130	70 - 130	0	20	
4-Chlorotoluene	ND		25.0	24.9		ug/L	100	70 - 130	70 - 130	1	20	
cis-1,2-Dichloroethene	ND		25.0	24.4		ug/L	98	70 - 130	70 - 130	2	20	
cis-1,3-Dichloropropene	ND		25.0	24.8		ug/L	99	70 - 133	70 - 133	3	20	
Dibromochloromethane	8.0		25.0	33.5		ug/L	102	70 - 148	70 - 148	1	25	
1,2-Dibromo-3-Chloropropane	ND		25.0	24.9		ug/L	99	48 - 140	48 - 140	3	30	
1,2-Dibromoethane (EDB)	ND		25.0	23.9		ug/L	95	70 - 131	70 - 131	4	25	
Dibromomethane	ND		25.0	24.4		ug/L	98	70 - 130	70 - 130	3	25	
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L	96	70 - 130	70 - 130	1	20	
1,3-Dichlorobenzene	ND		25.0	23.8		ug/L	95	70 - 130	70 - 130	2	20	
1,4-Dichlorobenzene	ND		25.0	23.5		ug/L	94	70 - 130	70 - 130	3	20	
Dichlorodifluoromethane	ND		25.0	24.7		ug/L	99	25 - 142	25 - 142	4	30	
1,1-Dichloroethane	ND		25.0	24.2		ug/L	97	65 - 130	65 - 130	3	20	
1,2-Dichloroethane	ND		25.0	25.5		ug/L	102	56 - 146	56 - 146	4	20	
1,1-Dichloroethene	ND		25.0	22.8		ug/L	91	70 - 130	70 - 130	5	20	
1,2-Dichloropropane	ND		25.0	24.3		ug/L	97	69 - 130	69 - 130	4	20	
1,3-Dichloropropane	ND		25.0	23.5		ug/L	94	70 - 130	70 - 130	4	25	
2,2-Dichloropropane	ND		25.0	26.7		ug/L	107	69 - 138	69 - 138	6	25	
1,1-Dichloropropene	ND		25.0	25.4		ug/L	101	64 - 130	64 - 130	2	20	
Ethylbenzene	ND		25.0	23.7		ug/L	95	70 - 130	70 - 130	2	20	
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.4		ug/L	102	70 - 130	70 - 130	1	25	
Hexachlorobutadiene	ND		25.0	23.8		ug/L	95	10 - 150	10 - 150	4	20	
2-Hexanone	ND		25.0	26.6		ug/L	106	10 - 150	10 - 150	4	35	
Isopropylbenzene	ND		25.0	23.7		ug/L	95	70 - 132	70 - 132	3	20	
Isopropyl Ether (DIPE)	ND		25.0	26.8		ug/L	107	64 - 138	64 - 138	1	25	
Methylene Chloride	1.6	J	25.0	25.6		ug/L	96	52 - 130	52 - 130	3	20	
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.3		ug/L	109	52 - 150	52 - 150	1	35	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.5		ug/L	98	70 - 130	70 - 130	3	25	
m,p-Xylene	ND		25.0	23.2		ug/L	93	70 - 133	70 - 133	4	25	
Naphthalene	ND		25.0	25.4		ug/L	102	60 - 140	60 - 140	2	30	
n-Butylbenzene	ND		25.0	24.9		ug/L	100	61 - 149	61 - 149	1	20	
N-Propylbenzene	ND		25.0	24.5		ug/L	98	66 - 135	66 - 135	0	20	
o-Xylene	ND		25.0	23.3		ug/L	93	70 - 133	70 - 133	4	20	
p-Isopropyltoluene	ND		25.0	23.6		ug/L	95	70 - 130	70 - 130	2	20	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 550-68394-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 350886**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier								
sec-Butylbenzene	ND		25.0	24.1		ug/L		96	67 - 134	1	20		
Styrene	ND		25.0	23.6		ug/L		94	29 - 150	4	35		
Tert-amyl-methyl ether (TAME)	ND		25.0	24.9		ug/L		100	68 - 133	1	30		
tert-Butyl alcohol (TBA)	ND		250	241		ug/L		96	70 - 130	2	25		
tert-Butylbenzene	ND		25.0	24.2		ug/L		97	70 - 130	0	20		
1,1,1,2-Tetrachloroethane	ND		25.0	22.2		ug/L		89	60 - 149	3	20		
1,1,2,2-Tetrachloroethane	ND		25.0	23.7		ug/L		95	63 - 130	1	30		
Tetrachloroethene	ND		25.0	23.3		ug/L		93	70 - 137	1	20		
Toluene	ND		25.0	23.6		ug/L		95	70 - 130	2	20		
trans-1,2-Dichloroethene	ND		25.0	24.1		ug/L		96	70 - 130	3	20		
trans-1,3-Dichloropropene	ND		25.0	24.7		ug/L		99	70 - 138	3	25		
1,2,3-Trichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140	2	20		
1,2,4-Trichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140	0	20		
1,1,1-Trichloroethane	ND		25.0	25.2		ug/L		101	70 - 130	3	20		
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	70 - 130	2	25		
Trichloroethene	ND		25.0	24.4		ug/L		97	70 - 130	3	20		
Trichlorofluoromethane	ND		25.0	26.4		ug/L		106	60 - 150	4	25		
1,2,3-Trichloropropane	ND		25.0	24.2		ug/L		97	60 - 130	2	30		
1,2,4-Trimethylbenzene	ND		25.0	24.7		ug/L		99	70 - 130	1	25		
1,3,5-Trimethylbenzene	ND		25.0	24.9		ug/L		100	70 - 130	2	20		
Vinyl chloride	ND		25.0	25.1		ug/L		100	50 - 137	2	30		
<b>Surrogate</b>		<b>MSD</b>	<b>MSD</b>										
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>									
4-Bromofluorobenzene (Surr)		99		80 - 120									
Dibromofluoromethane (Surr)		99		76 - 132									
Toluene-d8 (Surr)		101		80 - 128									

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 550-96749/30**

**Matrix: Water**

**Analysis Batch: 96749**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		1.0	0.28	ug/L			08/24/16 23:35	1

**Lab Sample ID: LCS 550-96749/31**

**Matrix: Water**

**Analysis Batch: 96749**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Perchlorate	25.0	25.9		ug/L		104	85 - 115

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## Method: 314.0 - Perchlorate (IC) (Continued)

**Lab Sample ID: LCSD 550-96749/32**

**Matrix: Water**

**Analysis Batch: 96749**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Perchlorate	25.0	26.4		ug/L		105	85 - 115	2 15

**Lab Sample ID: 440-155681-7 MS**

**Matrix: Water**

**Analysis Batch: 96749**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Perchlorate	410	E 4	25.0	416	E 4	ug/L		28	80 - 120

**Lab Sample ID: 440-155681-7 MSD**

**Matrix: Water**

**Analysis Batch: 96749**

**Client Sample ID: EMW-1B-556-GW-150816**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Perchlorate	410	E 4	25.0	416	E 4	ug/L		29	80 - 120	0 15

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## GC/MS VOA

### Analysis Batch: 350806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155681-8	EMW-6D-584-GW-150816	Total/NA	Water	8260B	1
440-155681-9	EMW-6D-584-GW-150816-D	Total/NA	Water	8260B	2
440-155681-10	EMW-6S-477-GW-150816	Total/NA	Water	8260B	3
440-155681-11	EPA-MW9B-725-GW-150816	Total/NA	Water	8260B	4
440-155681-12	EPA-MW9A-530-GW-150816	Total/NA	Water	8260B	5
440-155681-13	EPA-MW9A-530-GW-150816-D	Total/NA	Water	8260B	6
MB 440-350806/4	Method Blank	Total/NA	Water	8260B	7
LCS 440-350806/5	Lab Control Sample	Total/NA	Water	8260B	8
440-155584-B-1 MS	Matrix Spike	Total/NA	Water	8260B	9
440-155584-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	10

### Analysis Batch: 350815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155681-1	TB-LW-150816	Total/NA	Water	8260B	11
440-155681-2	EMW-7D-540-GW-150816	Total/NA	Water	8260B	12
440-155681-3	EMW-7S-470-GW-150816	Total/NA	Water	8260B	13
440-155681-4	EB-LW-150816	Total/NA	Water	8260B	
440-155681-5	EMW-1A-470-GW-150816	Total/NA	Water	8260B	
440-155681-6	EMW-1A-470-GW-150816-D	Total/NA	Water	8260B	
440-155681-7	EMW-1B-556-GW-150816	Total/NA	Water	8260B	
MB 440-350815/5	Method Blank	Total/NA	Water	8260B	
LCS 440-350815/6	Lab Control Sample	Total/NA	Water	8260B	
440-155681-7 MS	EMW-1B-556-GW-150816	Total/NA	Water	8260B	
440-155681-7 MSD	EMW-1B-556-GW-150816	Total/NA	Water	8260B	

### Analysis Batch: 350886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155681-14	Rialto-2-990-GW-150816	Total/NA	Water	8260B	
440-155681-15	EMW-4C-690-GW-150816	Total/NA	Water	8260B	
440-155681-16	EMW-4B-605-GW-150816	Total/NA	Water	8260B	
440-155681-17	EMW-4A-450-GW-150816	Total/NA	Water	8260B	
MB 440-350886/4	Method Blank	Total/NA	Water	8260B	
LCS 440-350886/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 440-350886/6	Lab Control Sample Dup	Total/NA	Water	8260B	
550-68394-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
550-68394-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

## HPLC/IC

### Analysis Batch: 96749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155681-2	EMW-7D-540-GW-150816	Total/NA	Water	314.0	
440-155681-3	EMW-7S-470-GW-150816	Total/NA	Water	314.0	
440-155681-4	EB-LW-150816	Total/NA	Water	314.0	
440-155681-5	EMW-1A-470-GW-150816	Total/NA	Water	314.0	
440-155681-6	EMW-1A-470-GW-150816-D	Total/NA	Water	314.0	
440-155681-7	EMW-1B-556-GW-150816	Total/NA	Water	314.0	
440-155681-8	EMW-6D-584-GW-150816	Total/NA	Water	314.0	
440-155681-9	EMW-6D-584-GW-150816-D	Total/NA	Water	314.0	
440-155681-10	EMW-6S-477-GW-150816	Total/NA	Water	314.0	

TestAmerica Irvine

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

## HPLC/IC (Continued)

### Analysis Batch: 96749 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155681-11	EPA-MW9B-725-GW-150816	Total/NA	Water	314.0	5
440-155681-12	EPA-MW9A-530-GW-150816	Total/NA	Water	314.0	6
440-155681-13	EPA-MW9A-530-GW-150816-D	Total/NA	Water	314.0	7
440-155681-14	Rialto-2-990-GW-150816	Total/NA	Water	314.0	8
440-155681-15	EMW-4C-690-GW-150816	Total/NA	Water	314.0	9
440-155681-16	EMW-4B-605-GW-150816	Total/NA	Water	314.0	10
440-155681-17	EMW-4A-450-GW-150816	Total/NA	Water	314.0	11
MB 550-96749/30	Method Blank	Total/NA	Water	314.0	12
LCS 550-96749/31	Lab Control Sample	Total/NA	Water	314.0	13
LCSD 550-96749/32	Lab Control Sample Dup	Total/NA	Water	314.0	
440-155681-7 MS	EMW-1B-556-GW-150816	Total/NA	Water	314.0	
440-155681-7 MSD	EMW-1B-556-GW-150816	Total/NA	Water	314.0	

## Definitions/Glossary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

#### HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

### Glossary

#### Abbreviation

These commonly used abbreviations may or may not be present in this report.

<input checked="" type="checkbox"/>	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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## Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155681-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

### Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	ELLAP		154268	02-01-17
AIHA-LAP, LLC	IHLAP		154268	07-01-17
Arizona	State Program	9	AZ0728	06-09-17
California	State Program	9	2941	11-30-17
Nevada	State Program	9	AZ01030	07-31-17
Oregon	NELAP	10	AZ100001	03-09-17
USDA	Federal		P330-09-00024	09-18-16 *

\* Certification renewal pending - certification considered valid.





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**TestAmerica Irvine**  
17461 Derrin Ave Suite 100  
Irvine, CA 92614-5817  
Phone (949) 261-1022 Fax (949) 260-3297

## Chain of Custody Record



**TestAmerica**  
LEADER IN ENVIRONMENTAL TESTING

Carrier Tracking No(s):

COC No:  
440-101393-1

Page:

Page 1 of 2

**Client Information (Sub Contract Lab)**

Sampler:

Phone:

Lab P/M:

Mata, Patty

E-Mail:

patty.mata@testamericainc.com

Company:

TestAmerica Laboratories, Inc

Address:

4625 East Cotton Ctr Blvd, Suite 189,

City:

Phoenix

State Zip:

AZ, 85040

Phone:

602-437-3340(Tel) 602-454-9303(Fax)

Email:

Project Name:

RFF Rialto Treatment, 60438759

Site:

Analysis Requested

Job #:

440-155881-1

Preservation Codes:

A - HCl

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Anchors

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

S - H2SO4

T - TSP Dodecahydrate

U - Acetone

V - MCAA

W - pH 4-5

Z - other (specify)

**Shipping/Receiving**

Due Date Requested:

8/25/2016

TAT Requested (days):

PO#:

WFO#:

SSOW#:

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155681-1

**Login Number:** 155681

**List Source:** TestAmerica Irvine

**List Number:** 1

**Creator:** Soderblom, Tim

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155681-1

**Login Number:** 155681

**List Source:** TestAmerica Phoenix

**List Number:** 2

**List Creation:** 08/19/16 10:30 AM

**Creator:** Doerr, Bret C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155681-1

**Login Number:** 155681

**List Source:** TestAmerica Phoenix

**List Number:** 3

**List Creation:** 08/19/16 10:31 AM

**Creator:** Gravlin, Andrea

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-155926-1

Client Project/Site: RFF Rialto Treatment, 60438759

For:

AECOM, Inc.

999 Town & Country Road

4th Floor

Orange, California 92868

Attn: Holly Holbrook



Authorized for release by:

8/31/2016 12:08:23 PM

Patty Mata, Senior Project Manager

(949)261-1022

[patty.mata@testamericainc.com](mailto:patty.mata@testamericainc.com)

### LINKS

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results through

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The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Sample Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-155926-1	TB-LW-160816	Water	08/16/16 07:10	08/17/16 17:20
440-155926-2	PW-2-485-GW-160816	Water	08/16/16 07:35	08/17/16 17:20
440-155926-3	EB-LW-160816	Water	08/16/16 07:50	08/17/16 17:20
440-155926-4	EMW-5C-720-GW-160816	Water	08/16/16 08:10	08/17/16 17:20
440-155926-5	EMW-5B-615-GW-160816	Water	08/16/16 08:25	08/17/16 17:20
440-155926-6	EMW-5A-450-GW-160816	Water	08/16/16 08:35	08/17/16 17:20
440-155926-7	EMW-3C-640-GW-160816	Water	08/16/16 09:10	08/17/16 17:20
440-155926-8	EMW-3B-559-GW-160816	Water	08/16/16 09:25	08/17/16 17:20
440-155926-9	EMW-3B-559-GW-160816-D	Water	08/16/16 09:30	08/17/16 17:20
440-155926-10	EMW-3A-418-GW-160816	Water	08/16/16 09:50	08/17/16 17:20

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TestAmerica Irvine

# Case Narrative

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Job ID: 440-155926-1

### Laboratory: TestAmerica Irvine

#### Narrative

#### Job Narrative 440-155926-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/17/2016 5:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

#### GC/MS VOA

EPA Method 8260B: Due to relatively low concentration and low compound molecular weight, the tert-Butanol (TBA) results for selected samples were identified by retention time (RT) and the presence of a single mass ion instead of the presence of at least two mass ions. Affected sample results were flagged with "ID" qualifiers.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: TB-LW-160816**

**Lab Sample ID: 440-155926-1**

**Matrix: Water**

**Date Collected: 08/16/16 07:10**

**Date Received: 08/17/16 17:20**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 13:02	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 13:02	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 13:02	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 13:02	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 13:02	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 13:02	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 13:02	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 13:02	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 13:02	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/24/16 13:02	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Dibromomethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/24/16 13:02	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/24/16 13:02	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/24/16 13:02	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/24/16 13:02	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
2-Hexanone	ND		10	2.5	ug/L			08/24/16 13:02	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/24/16 13:02	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/24/16 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/24/16 13:02	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/24/16 13:02	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/24/16 13:02	1
Naphthalene	ND		5.0	0.40	ug/L			08/24/16 13:02	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/24/16 13:02	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
o-Xylene	ND		1.0	0.25	ug/L			08/24/16 13:02	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: TB-LW-160816**

Date Collected: 08/16/16 07:10

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-1**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
Styrene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/24/16 13:02	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/24/16 13:02	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Toluene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/24/16 13:02	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 13:02	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 13:02	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Trichloroethylene	ND		1.0	0.25	ug/L			08/24/16 13:02	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 13:02	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 13:02	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:02	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 13:02	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 13:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		80 - 120					08/24/16 13:02	1
Dibromofluoromethane (Surr)	99		76 - 132					08/24/16 13:02	1
Toluene-d8 (Surr)	104		80 - 128					08/24/16 13:02	1

**Client Sample ID: PW-2-485-GW-160816**

Date Collected: 08/16/16 07:35

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-2**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	50	ug/L			08/24/16 01:19	5
Benzene	ND		2.5	1.3	ug/L			08/24/16 01:19	5
Bromobenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Bromochloromethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Bromodichloromethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Bromoform	ND		5.0	2.0	ug/L			08/24/16 01:19	5
Bromomethane	ND		10	1.3	ug/L			08/24/16 01:19	5
1,3-Butadiene	ND		5.0	2.5	ug/L			08/24/16 01:19	5
2-Butanone (MEK)	ND		50	13	ug/L			08/24/16 01:19	5
Carbon disulfide	ND		10	2.5	ug/L			08/24/16 01:19	5
Carbon tetrachloride	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Chlorobenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
2-Chloro-1,3-butadiene	ND		10	2.5	ug/L			08/24/16 01:19	5
Chloroethane	ND		5.0	2.0	ug/L			08/24/16 01:19	5

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: PW-2-485-GW-160816**

**Lab Sample ID: 440-155926-2**

**Matrix: Water**

Date Collected: 08/16/16 07:35

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	2.1	J	5.0	1.3	ug/L			08/24/16 01:19	5
Chloromethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
2-Chlorotoluene	ND		10	1.3	ug/L			08/24/16 01:19	5
4-Chlorotoluene	ND		10	1.3	ug/L			08/24/16 01:19	5
cis-1,2-Dichloroethene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
cis-1,3-Dichloropropene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Dibromochloromethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2-Dibromo-3-Chloropropane	ND		10	2.5	ug/L			08/24/16 01:19	5
1,2-Dibromoethane (EDB)	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Dibromomethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2-Dichlorobenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,3-Dichlorobenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,4-Dichlorobenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Dichlorodifluoromethane	ND		5.0	2.0	ug/L			08/24/16 01:19	5
1,1-Dichloroethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2-Dichloroethane	ND		2.5	1.3	ug/L			08/24/16 01:19	5
1,1-Dichloroethene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2-Dichloropropane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,3-Dichloropropane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
2,2-Dichloropropane	ND		5.0	2.0	ug/L			08/24/16 01:19	5
1,1-Dichloropropene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Ethylbenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Ethyl-t-butyl ether (ETBE)	ND		10	1.3	ug/L			08/24/16 01:19	5
Hexachlorobutadiene	ND		10	1.3	ug/L			08/24/16 01:19	5
2-Hexanone	ND		50	13	ug/L			08/24/16 01:19	5
Isopropylbenzene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Isopropyl Ether (DIPE)	ND		10	1.3	ug/L			08/24/16 01:19	5
Methylene Chloride	ND		25	4.4	ug/L			08/24/16 01:19	5
4-Methyl-2-pentanone (MIBK)	ND		50	13	ug/L			08/24/16 01:19	5
Methyl-t-Butyl Ether (MTBE)	ND		5.0	1.3	ug/L			08/24/16 01:19	5
m,p-Xylene	ND		5.0	2.5	ug/L			08/24/16 01:19	5
Naphthalene	ND		25	2.0	ug/L			08/24/16 01:19	5
n-Butylbenzene	ND		10	2.0	ug/L			08/24/16 01:19	5
N-Propylbenzene	ND		10	1.3	ug/L			08/24/16 01:19	5
o-Xylene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
p-Isopropyltoluene	ND		10	1.3	ug/L			08/24/16 01:19	5
sec-Butylbenzene	ND		10	1.3	ug/L			08/24/16 01:19	5
Styrene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Tert-amyl-methyl ether (TAME)	ND		10	1.3	ug/L			08/24/16 01:19	5
tert-Butyl alcohol (TBA)	ND		50	25	ug/L			08/24/16 01:19	5
tert-Butylbenzene	ND		10	1.3	ug/L			08/24/16 01:19	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Tetrachloroethene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
Toluene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
trans-1,4-Dichloro-2-butene	ND		25	13	ug/L			08/24/16 01:19	5
trans-1,2-Dichloroethene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
trans-1,3-Dichloropropene	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2,3-Trichlorobenzene	ND		10	2.0	ug/L			08/24/16 01:19	5

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: PW-2-485-GW-160816**

**Lab Sample ID: 440-155926-2**

**Matrix: Water**

Date Collected: 08/16/16 07:35  
Date Received: 08/17/16 17:20

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		10	2.0	ug/L			08/24/16 01:19	5
1,1,1-Trichloroethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,1,2-Trichloroethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
<b>Trichloroethylene</b>	<b>350</b>		5.0	1.3	ug/L			08/24/16 01:19	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			08/24/16 01:19	5
1,2,3-Trichloropropane	ND		10	2.0	ug/L			08/24/16 01:19	5
1,2,4-Trimethylbenzene	ND		10	1.3	ug/L			08/24/16 01:19	5
1,3,5-Trimethylbenzene	ND		10	1.3	ug/L			08/24/16 01:19	5
Vinyl chloride	ND		2.5	1.3	ug/L			08/24/16 01:19	5
Xylenes, Total	ND		10	2.5	ug/L			08/24/16 01:19	5
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		101		80 - 120				08/24/16 01:19	5
Dibromofluoromethane (Surr)		98		76 - 132				08/24/16 01:19	5
Toluene-d8 (Surr)		106		80 - 128				08/24/16 01:19	5
<b>Method: 314.0 - Perchlorate (IC)</b>	<b>Result</b>	<b>Qualifier</b>	<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Analyte									
Perchlorate	<b>570</b>		100	28	ug/L			08/29/16 18:30	100

**Client Sample ID: EB-LW-160816**

**Lab Sample ID: 440-155926-3**

**Matrix: Water**

Date Collected: 08/16/16 07:50  
Date Received: 08/17/16 17:20

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 00:52	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 00:52	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 00:52	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 00:52	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 00:52	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 00:52	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 00:52	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 00:52	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 00:52	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 00:52	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 00:52	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 00:52	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 00:52	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 00:52	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/24/16 00:52	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/24/16 00:52	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/24/16 00:52	1
Dibromomethane	ND		1.0	0.25	ug/L			08/24/16 00:52	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EB-LW-160816**

**Lab Sample ID: 440-155926-3**

Date Collected: 08/16/16 07:50

Matrix: Water

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/24/16 00:52		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/24/16 00:52		1
1,1-Dichloroethylene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/24/16 00:52		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/24/16 00:52		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
2-Hexanone	ND		10	2.5	ug/L		08/24/16 00:52		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/24/16 00:52		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/24/16 00:52		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/24/16 00:52		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/24/16 00:52		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/24/16 00:52		1
Naphthalene	ND		5.0	0.40	ug/L		08/24/16 00:52		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/24/16 00:52		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
o-Xylene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
Styrene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/24/16 00:52		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/24/16 00:52		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Toluene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/24/16 00:52		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/24/16 00:52		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/24/16 00:52		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Trichloroethene	ND		1.0	0.25	ug/L		08/24/16 00:52		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/24/16 00:52		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/24/16 00:52		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/24/16 00:52		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/24/16 00:52		1
Xylenes, Total	ND		2.0	0.50	ug/L		08/24/16 00:52		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EB-LW-160816**

Date Collected: 08/16/16 07:50

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-3**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/24/16 00:52	1
Dibromofluoromethane (Surr)	101		76 - 132		08/24/16 00:52	1
Toluene-d8 (Surr)	104		80 - 128		08/24/16 00:52	1

**Method: 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/26/16 22:45	1

**Client Sample ID: EMW-5C-720-GW-160816**

Date Collected: 08/16/16 08:10

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-4**

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	77		40	20	ug/L			08/23/16 20:30	2
Benzene	ND		1.0	0.50	ug/L			08/23/16 20:30	2
Bromobenzene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Bromochloromethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Bromodichloromethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Bromoform	ND		2.0	0.80	ug/L			08/23/16 20:30	2
Bromomethane	ND		4.0	0.50	ug/L			08/23/16 20:30	2
1,3-Butadiene	ND		2.0	1.0	ug/L			08/23/16 20:30	2
2-Butanone (MEK)	ND		20	5.0	ug/L			08/23/16 20:30	2
Carbon disulfide	ND		4.0	1.0	ug/L			08/23/16 20:30	2
Carbon tetrachloride	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Chlorobenzene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
2-Chloro-1,3-butadiene	ND		4.0	1.0	ug/L			08/23/16 20:30	2
Chloroethane	ND		2.0	0.80	ug/L			08/23/16 20:30	2
Chloroform	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Chloromethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
2-Chlorotoluene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
4-Chlorotoluene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
cis-1,2-Dichloroethene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
cis-1,3-Dichloropropene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Dibromochloromethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,2-Dibromo-3-Chloropropane	ND		4.0	1.0	ug/L			08/23/16 20:30	2
1,2-Dibromoethane (EDB)	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Dibromomethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,2-Dichlorobenzene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,3-Dichlorobenzene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,4-Dichlorobenzene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Dichlorodifluoromethane	ND		2.0	0.80	ug/L			08/23/16 20:30	2
1,1-Dichloroethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
<b>1,2-Dichloroethane</b>	<b>5.1</b>		1.0	0.50	ug/L			08/23/16 20:30	2
1,1-Dichloroethene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,2-Dichloropropane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,3-Dichloropropane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
2,2-Dichloropropane	ND		2.0	0.80	ug/L			08/23/16 20:30	2
1,1-Dichloropropene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
<b>Ethylbenzene</b>	<b>5.7</b>		2.0	0.50	ug/L			08/23/16 20:30	2

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5C-720-GW-160816**

**Lab Sample ID: 440-155926-4**

**Matrix: Water**

Date Collected: 08/16/16 08:10

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	ND		4.0	0.50	ug/L			08/23/16 20:30	2
Hexachlorobutadiene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
2-Hexanone	ND		20	5.0	ug/L			08/23/16 20:30	2
<b>Isopropylbenzene</b>	<b>1.4</b>	<b>J</b>	2.0	0.50	ug/L			08/23/16 20:30	2
Isopropyl Ether (DIPE)	ND		4.0	0.50	ug/L			08/23/16 20:30	2
Methylene Chloride	ND		10	1.8	ug/L			08/23/16 20:30	2
4-Methyl-2-pentanone (MIBK)	ND		20	5.0	ug/L			08/23/16 20:30	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.50	ug/L			08/23/16 20:30	2
<b>m,p-Xylene</b>	<b>4.3</b>		2.0	1.0	ug/L			08/23/16 20:30	2
Naphthalene	ND		10	0.80	ug/L			08/23/16 20:30	2
n-Butylbenzene	ND		4.0	0.80	ug/L			08/23/16 20:30	2
<b>N-Propylbenzene</b>	<b>1.3</b>	<b>J</b>	4.0	0.50	ug/L			08/23/16 20:30	2
<b>o-Xylene</b>	<b>5.2</b>		2.0	0.50	ug/L			08/23/16 20:30	2
p-Isopropyltoluene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
sec-Butylbenzene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
Styrene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Tert-amyl-methyl ether (TAME)	ND		4.0	0.50	ug/L			08/23/16 20:30	2
<b>tert-Butyl alcohol (TBA)</b>	<b>12</b>	<b>J ID</b>	20	10	ug/L			08/23/16 20:30	2
tert-Butylbenzene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Tetrachloroethene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
<b>Toluene</b>	<b>72</b>		2.0	0.50	ug/L			08/23/16 20:30	2
trans-1,4-Dichloro-2-butene	ND		10	5.0	ug/L			08/23/16 20:30	2
trans-1,2-Dichloroethene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
trans-1,3-Dichloropropene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,2,3-Trichlorobenzene	ND		4.0	0.80	ug/L			08/23/16 20:30	2
1,2,4-Trichlorobenzene	ND		4.0	0.80	ug/L			08/23/16 20:30	2
1,1,1-Trichloroethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,1,2-Trichloroethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Trichloroethene	ND		2.0	0.50	ug/L			08/23/16 20:30	2
Trichlorofluoromethane	ND		2.0	0.50	ug/L			08/23/16 20:30	2
1,2,3-Trichloropropane	ND		4.0	0.80	ug/L			08/23/16 20:30	2
<b>1,2,4-Trimethylbenzene</b>	<b>0.60</b>	<b>J</b>	4.0	0.50	ug/L			08/23/16 20:30	2
1,3,5-Trimethylbenzene	ND		4.0	0.50	ug/L			08/23/16 20:30	2
Vinyl chloride	ND		1.0	0.50	ug/L			08/23/16 20:30	2
<b>Xylenes, Total</b>	<b>9.5</b>		4.0	1.0	ug/L			08/23/16 20:30	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97				80 - 120				
Dibromofluoromethane (Surr)	97				76 - 132				
Toluene-d8 (Surr)	108				80 - 128				

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/26/16 23:08	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5B-615-GW-160816**

**Lab Sample ID: 440-155926-5**

**Matrix: Water**

Date Collected: 08/16/16 08:25

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L		08/23/16 21:48		1
Benzene	ND		0.50	0.25	ug/L		08/23/16 21:48		1
Bromobenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Bromoform	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Bromomethane	ND		2.0	0.25	ug/L		08/23/16 21:48		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/23/16 21:48		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/23/16 21:48		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/23/16 21:48		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/23/16 21:48		1
Chloroethane	ND		1.0	0.40	ug/L		08/23/16 21:48		1
Chloroform	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Chloromethane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/23/16 21:48		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/23/16 21:48		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/23/16 21:48		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Dibromomethane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/23/16 21:48		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/23/16 21:48		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/23/16 21:48		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/23/16 21:48		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/23/16 21:48		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/23/16 21:48		1
2-Hexanone	ND		10	2.5	ug/L		08/23/16 21:48		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/23/16 21:48		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/23/16 21:48		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/23/16 21:48		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/23/16 21:48		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/23/16 21:48		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/23/16 21:48		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/23/16 21:48		1
o-Xylene	ND		1.0	0.25	ug/L		08/23/16 21:48		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/23/16 21:48		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5B-615-GW-160816**

**Lab Sample ID: 440-155926-5**

**Matrix: Water**

Date Collected: 08/16/16 08:25  
Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/23/16 21:48	1
Styrene	ND		1.0	0.25	ug/L			08/23/16 21:48	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/23/16 21:48	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/23/16 21:48	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/23/16 21:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/23/16 21:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/23/16 21:48	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/23/16 21:48	1
Toluene	ND		1.0	0.25	ug/L			08/23/16 21:48	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/23/16 21:48	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/23/16 21:48	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/23/16 21:48	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/23/16 21:48	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/23/16 21:48	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/23/16 21:48	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/23/16 21:48	1
<b>Trichloroethene</b>	<b>1.9</b>		1.0	0.25	ug/L			08/23/16 21:48	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/23/16 21:48	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/23/16 21:48	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/23/16 21:48	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/23/16 21:48	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/23/16 21:48	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/23/16 21:48	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120					08/23/16 21:48	1
Dibromofluoromethane (Surr)	96		76 - 132					08/23/16 21:48	1
Toluene-d8 (Surr)	105		80 - 128					08/23/16 21:48	1

## Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0	0.40	ug/L			08/24/16 13:28	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120					08/24/16 13:28	1
Dibromofluoromethane (Surr)	98		76 - 132					08/24/16 13:28	1
Toluene-d8 (Surr)	108		80 - 128					08/24/16 13:28	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/27/16 00:17	1

**Client Sample ID: EMW-5A-450-GW-160816**

**Lab Sample ID: 440-155926-6**

**Matrix: Water**

Date Collected: 08/16/16 08:35  
Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 13:54	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 13:54	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 13:54	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5A-450-GW-160816**

**Lab Sample ID: 440-155926-6**

**Matrix: Water**

Date Collected: 08/16/16 08:35

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Bromodichloromethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Bromoform	ND		1.0	0.40	ug/L		08/24/16 13:54		1
Bromomethane	ND		2.0	0.25	ug/L		08/24/16 13:54		1
1,3-Butadiene	ND		1.0	0.50	ug/L		08/24/16 13:54		1
2-Butanone (MEK)	ND		10	2.5	ug/L		08/24/16 13:54		1
Carbon disulfide	ND		2.0	0.50	ug/L		08/24/16 13:54		1
Carbon tetrachloride	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Chlorobenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L		08/24/16 13:54		1
Chloroethane	ND		1.0	0.40	ug/L		08/24/16 13:54		1
Chloroform	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Chloromethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/24/16 13:54		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Dibromomethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/24/16 13:54		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,2-Dichloroethane	ND		0.50	0.25	ug/L		08/24/16 13:54		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,2-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
2,2-Dichloropropene	ND		1.0	0.40	ug/L		08/24/16 13:54		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/24/16 13:54		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
2-Hexanone	ND		10	2.5	ug/L		08/24/16 13:54		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/24/16 13:54		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/24/16 13:54		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/24/16 13:54		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/24/16 13:54		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/24/16 13:54		1
Naphthalene	ND		5.0	0.40	ug/L		08/24/16 13:54		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/24/16 13:54		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
o-Xylene	ND		1.0	0.25	ug/L		08/24/16 13:54		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 13:54		1
Styrene	ND		1.0	0.25	ug/L		08/24/16 13:54		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5A-450-GW-160816**

**Lab Sample ID: 440-155926-6**

**Matrix: Water**

Date Collected: 08/16/16 08:35  
Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/24/16 13:54	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/24/16 13:54	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 13:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 13:54	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/24/16 13:54	1
Toluene	ND		1.0	0.25	ug/L			08/24/16 13:54	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/24/16 13:54	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 13:54	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 13:54	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 13:54	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 13:54	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 13:54	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 13:54	1
<b>Trichloroethene</b>	<b>5.4</b>		1.0	0.25	ug/L			08/24/16 13:54	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 13:54	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 13:54	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:54	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 13:54	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 13:54	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 13:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		80 - 120					08/24/16 13:54	1
Dibromofluoromethane (Surr)	100		76 - 132					08/24/16 13:54	1
Toluene-d8 (Surr)	105		80 - 128					08/24/16 13:54	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	81		10	2.8	ug/L			08/30/16 11:22	10

**Client Sample ID: EMW-3C-640-GW-160816**

**Lab Sample ID: 440-155926-7**

**Matrix: Water**

Date Collected: 08/16/16 09:10  
Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acetone</b>	<b>16 J</b>		20	10	ug/L			08/24/16 14:21	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 14:21	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 14:21	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 14:21	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 14:21	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 14:21	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 14:21	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 14:21	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 14:21	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3C-640-GW-160816**

**Lab Sample ID: 440-155926-7**

**Matrix: Water**

Date Collected: 08/16/16 09:10

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.40	ug/L		08/24/16 14:21		1
Chloroform	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Chloromethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
2-Chlorotoluene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
4-Chlorotoluene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Dibromochloromethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L		08/24/16 14:21		1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Dibromomethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/24/16 14:21		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
<b>1,2-Dichloroethane</b>	<b>0.50</b>		0.50	0.25	ug/L		08/24/16 14:21		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/24/16 14:21		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/24/16 14:21		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
2-Hexanone	ND		10	2.5	ug/L		08/24/16 14:21		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/24/16 14:21		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/24/16 14:21		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/24/16 14:21		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/24/16 14:21		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/24/16 14:21		1
Naphthalene	ND		5.0	0.40	ug/L		08/24/16 14:21		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/24/16 14:21		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
o-Xylene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
Styrene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/24/16 14:21		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/24/16 14:21		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:21		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 14:21		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
<b>Toluene</b>	<b>7.3</b>		1.0	0.25	ug/L		08/24/16 14:21		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/24/16 14:21		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 14:21		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 14:21		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3C-640-GW-160816**

**Lab Sample ID: 440-155926-7**

**Matrix: Water**

Date Collected: 08/16/16 09:10

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 14:21	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 14:21	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 14:21	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Trichloroethene	ND		1.0	0.25	ug/L			08/24/16 14:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 14:21	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 14:21	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 14:21	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 14:21	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 14:21	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 14:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100			80 - 120				08/24/16 14:21	1
Dibromofluoromethane (Surr)	100			76 - 132				08/24/16 14:21	1
Toluene-d8 (Surr)	106			80 - 128				08/24/16 14:21	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/27/16 01:02	1

**Client Sample ID: EMW-3B-559-GW-160816**

**Lab Sample ID: 440-155926-8**

**Matrix: Water**

Date Collected: 08/16/16 09:25

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 14:47	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 14:47	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 14:47	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 14:47	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 14:47	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 14:47	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 14:47	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 14:47	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 14:47	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 14:47	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 14:47	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 14:47	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 14:47	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 14:47	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 14:47	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/24/16 14:47	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/24/16 14:47	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/24/16 14:47	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3B-559-GW-160816**

**Lab Sample ID: 440-155926-8**

**Matrix: Water**

Date Collected: 08/16/16 09:25

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L		08/24/16 14:47		1
1,1-Dichloroethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
<b>1,2-Dichloroethane</b>	<b>0.44</b>	<b>J</b>	0.50	0.25	ug/L		08/24/16 14:47		1
1,1-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,2-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,3-Dichloropropane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
2,2-Dichloropropane	ND		1.0	0.40	ug/L		08/24/16 14:47		1
1,1-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Ethylbenzene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L		08/24/16 14:47		1
Hexachlorobutadiene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
2-Hexanone	ND		10	2.5	ug/L		08/24/16 14:47		1
Isopropylbenzene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L		08/24/16 14:47		1
Methylene Chloride	ND		5.0	0.88	ug/L		08/24/16 14:47		1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L		08/24/16 14:47		1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L		08/24/16 14:47		1
m,p-Xylene	ND		1.0	0.50	ug/L		08/24/16 14:47		1
Naphthalene	ND		5.0	0.40	ug/L		08/24/16 14:47		1
n-Butylbenzene	ND		2.0	0.40	ug/L		08/24/16 14:47		1
N-Propylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
o-Xylene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
p-Isopropyltoluene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
sec-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
Styrene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L		08/24/16 14:47		1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L		08/24/16 14:47		1
tert-Butylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
Tetrachloroethene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
<b>Toluene</b>	<b>3.6</b>		1.0	0.25	ug/L		08/24/16 14:47		1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L		08/24/16 14:47		1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L		08/24/16 14:47		1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L		08/24/16 14:47		1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
<b>Trichloroethene</b>	<b>0.48</b>	<b>J</b>	1.0	0.25	ug/L		08/24/16 14:47		1
Trichlorofluoromethane	ND		1.0	0.25	ug/L		08/24/16 14:47		1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L		08/24/16 14:47		1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L		08/24/16 14:47		1
Vinyl chloride	ND		0.50	0.25	ug/L		08/24/16 14:47		1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3B-559-GW-160816**

**Lab Sample ID: 440-155926-8**

Matrix: Water

Date Collected: 08/16/16 09:25

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 14:47	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	101		80 - 120					08/24/16 14:47	1
Dibromofluoromethane (Surr)	96		76 - 132					08/24/16 14:47	1
Toluene-d8 (Surr)	106		80 - 128					08/24/16 14:47	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/27/16 02:11	1

**Client Sample ID: EMW-3B-559-GW-160816-D**

**Lab Sample ID: 440-155926-9**

Matrix: Water

Date Collected: 08/16/16 09:30

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 15:13	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 15:13	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 15:13	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 15:13	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 15:13	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 15:13	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 15:13	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 15:13	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 15:13	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/24/16 15:13	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Dibromomethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/24/16 15:13	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
<b>1,2-Dichloroethane</b>	<b>0.59</b>		0.50	0.25	ug/L			08/24/16 15:13	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,2-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:13	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3B-559-GW-160816-D**

**Lab Sample ID: 440-155926-9**

**Matrix: Water**

Date Collected: 08/16/16 09:30

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/24/16 15:13	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/24/16 15:13	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
2-Hexanone	ND		10	2.5	ug/L			08/24/16 15:13	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/24/16 15:13	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/24/16 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/24/16 15:13	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/24/16 15:13	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/24/16 15:13	1
Naphthalene	ND		5.0	0.40	ug/L			08/24/16 15:13	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/24/16 15:13	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
o-Xylene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
Styrene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/24/16 15:13	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/24/16 15:13	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
Tetrachloroethene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
<b>Toluene</b>	<b>4.1</b>		1.0	0.25	ug/L			08/24/16 15:13	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/24/16 15:13	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 15:13	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 15:13	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
<b>Trichloroethene</b>	<b>0.46 J</b>		1.0	0.25	ug/L			08/24/16 15:13	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 15:13	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 15:13	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:13	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 15:13	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		08/24/16 15:13	1
Dibromofluoromethane (Surr)	98		76 - 132		08/24/16 15:13	1
Toluene-d8 (Surr)	105		80 - 128		08/24/16 15:13	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.28	ug/L			08/27/16 02:34	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3A-418-GW-160816**

**Lab Sample ID: 440-155926-10**

Date Collected: 08/16/16 09:50

Matrix: Water

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	10	ug/L			08/24/16 15:39	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 15:39	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 15:39	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 15:39	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 15:39	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 15:39	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 15:39	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 15:39	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 15:39	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/24/16 15:39	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Dibromomethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/24/16 15:39	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/24/16 15:39	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/24/16 15:39	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/24/16 15:39	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
2-Hexanone	ND		10	2.5	ug/L			08/24/16 15:39	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/24/16 15:39	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/24/16 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/24/16 15:39	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/24/16 15:39	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/24/16 15:39	1
Naphthalene	ND		5.0	0.40	ug/L			08/24/16 15:39	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/24/16 15:39	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
o-Xylene	ND		1.0	0.25	ug/L			08/24/16 15:39	1

TestAmerica Irvine

# Client Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-3A-418-GW-160816**

**Lab Sample ID: 440-155926-10**

**Matrix: Water**

Date Collected: 08/16/16 09:50

Date Received: 08/17/16 17:20

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
sec-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
Styrene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Tert-amyl-methyl ether (TAME)	ND		2.0	0.25	ug/L			08/24/16 15:39	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			08/24/16 15:39	1
tert-Butylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
Tetrachloroethylene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
<b>Toluene</b>	<b>0.39 J</b>		1.0	0.25	ug/L			08/24/16 15:39	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.5	ug/L			08/24/16 15:39	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
trans-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2,3-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 15:39	1
1,2,4-Trichlorobenzene	ND		2.0	0.40	ug/L			08/24/16 15:39	1
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
<b>Trichloroethylene</b>	<b>0.70 J</b>		1.0	0.25	ug/L			08/24/16 15:39	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 15:39	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 15:39	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 15:39	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 15:39	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 15:39	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		80 - 120		08/24/16 15:39	1
Dibromofluoromethane (Surr)	99		76 - 132		08/24/16 15:39	1
Toluene-d8 (Surr)	107		80 - 128		08/24/16 15:39	1

## Method: 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perchlorate</b>	<b>28</b>		1.0	0.28	ug/L			08/27/16 02:57	1

TestAmerica Irvine

## Method Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
314.0	Perchlorate (IC)	EPA	TAL PHX

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: TB-LW-160816**

Date Collected: 08/16/16 07:10

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 13:02	MM1	TAL IRV

**Client Sample ID: PW-2-485-GW-160816**

Date Collected: 08/16/16 07:35

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	10 mL	10 mL	351362	08/24/16 01:19	WK	TAL IRV
Total/NA	Analysis	314.0		100			97083	08/29/16 18:30	KLH	TAL PHX

**Client Sample ID: EB-LW-160816**

Date Collected: 08/16/16 07:50

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351362	08/24/16 00:52	WK	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/26/16 22:45	BCB	TAL PHX

**Client Sample ID: EMW-5C-720-GW-160816**

Date Collected: 08/16/16 08:10

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	10 mL	10 mL	351362	08/23/16 20:30	WK	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/26/16 23:08	BCB	TAL PHX

**Client Sample ID: EMW-5B-615-GW-160816**

Date Collected: 08/16/16 08:25

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351362	08/23/16 21:48	WK	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	351460	08/24/16 13:28	MM1	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/27/16 00:17	BCB	TAL PHX

**Client Sample ID: EMW-5A-450-GW-160816**

Date Collected: 08/16/16 08:35

Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 13:54	MM1	TAL IRV

TestAmerica Irvine

## Lab Chronicle

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

**Client Sample ID: EMW-5A-450-GW-160816**

Date Collected: 08/16/16 08:35  
Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-6**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	314.0		10			97083	08/30/16 11:22	KLH	TAL PHX

**Client Sample ID: EMW-3C-640-GW-160816**

Date Collected: 08/16/16 09:10  
Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-7**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 14:21	MM1	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/27/16 01:02	BCB	TAL PHX

**Client Sample ID: EMW-3B-559-GW-160816**

Date Collected: 08/16/16 09:25  
Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-8**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 14:47	MM1	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/27/16 02:11	BCB	TAL PHX

**Client Sample ID: EMW-3B-559-GW-160816-D**

Date Collected: 08/16/16 09:30  
Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 15:13	MM1	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/27/16 02:34	BCB	TAL PHX

**Client Sample ID: EMW-3A-418-GW-160816**

Date Collected: 08/16/16 09:50  
Date Received: 08/17/16 17:20

**Lab Sample ID: 440-155926-10**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	351460	08/24/16 15:39	MM1	TAL IRV
Total/NA	Analysis	314.0		1			96930	08/27/16 02:57	BCB	TAL PHX

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-351362/4**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			08/23/16 19:37	1
Benzene	ND		0.50	0.25	ug/L			08/23/16 19:37	1
Bromobenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Bromoform	ND		1.0	0.40	ug/L			08/23/16 19:37	1
Bromomethane	ND		2.0	0.25	ug/L			08/23/16 19:37	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/23/16 19:37	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/23/16 19:37	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/23/16 19:37	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/23/16 19:37	1
Chloroethane	ND		1.0	0.40	ug/L			08/23/16 19:37	1
Chloroform	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Chloromethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
2-Chlorotoluene	ND		2.0	0.25	ug/L			08/23/16 19:37	1
4-Chlorotoluene	ND		2.0	0.25	ug/L			08/23/16 19:37	1
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
cis-1,3-Dichloropropene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Dibromochloromethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.50	ug/L			08/23/16 19:37	1
1,2-Dibromoethane (EDB)	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Dibromomethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Dichlorodifluoromethane	ND		1.0	0.40	ug/L			08/23/16 19:37	1
1,1-Dichloroethane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			08/23/16 19:37	1
1,1-Dichloroethene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,2-Dichloropropane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
1,3-Dichloropropane	ND		1.0	0.25	ug/L			08/23/16 19:37	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			08/23/16 19:37	1
1,1-Dichloropropene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Ethyl-t-butyl ether (ETBE)	ND		2.0	0.25	ug/L			08/23/16 19:37	1
Hexachlorobutadiene	ND		2.0	0.25	ug/L			08/23/16 19:37	1
2-Hexanone	ND		10	2.5	ug/L			08/23/16 19:37	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/23/16 19:37	1
Isopropyl Ether (DIPE)	ND		2.0	0.25	ug/L			08/23/16 19:37	1
Methylene Chloride	ND		5.0	0.88	ug/L			08/23/16 19:37	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.5	ug/L			08/23/16 19:37	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.25	ug/L			08/23/16 19:37	1
m,p-Xylene	ND		1.0	0.50	ug/L			08/23/16 19:37	1
Naphthalene	ND		5.0	0.40	ug/L			08/23/16 19:37	1
n-Butylbenzene	ND		2.0	0.40	ug/L			08/23/16 19:37	1
N-Propylbenzene	ND		2.0	0.25	ug/L			08/23/16 19:37	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-351362/4**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/23/16 19:37	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/23/16 19:37	1
Styrene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/23/16 19:37	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/23/16 19:37	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/23/16 19:37	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/23/16 19:37	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/23/16 19:37	1
Tetrachloroethene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
Toluene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/23/16 19:37	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/23/16 19:37	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/23/16 19:37	1
1,1,1-Trichloroethane	ND				1.0	0.25	ug/L			08/23/16 19:37	1
1,1,2-Trichloroethane	ND				1.0	0.25	ug/L			08/23/16 19:37	1
Trichloroethene	ND				1.0	0.25	ug/L			08/23/16 19:37	1
Trichlorofluoromethane	ND				1.0	0.25	ug/L			08/23/16 19:37	1
1,2,3-Trichloropropane	ND				2.0	0.40	ug/L			08/23/16 19:37	1
1,2,4-Trimethylbenzene	ND				2.0	0.25	ug/L			08/23/16 19:37	1
1,3,5-Trimethylbenzene	ND				2.0	0.25	ug/L			08/23/16 19:37	1
Vinyl chloride	ND				0.50	0.25	ug/L			08/23/16 19:37	1
Xylenes, Total	ND				2.0	0.50	ug/L			08/23/16 19:37	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	99		80 - 120				08/23/16 19:37	1
Dibromofluoromethane (Surr)	99		76 - 132				08/23/16 19:37	1
Toluene-d8 (Surr)	105		80 - 128				08/23/16 19:37	1

**Lab Sample ID: LCS 440-351362/5**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	24.3		ug/L	97	10 - 150	
Benzene	25.0	24.1		ug/L	96	68 - 130	
Bromobenzene	25.0	24.0		ug/L	96	70 - 130	
Bromochloromethane	25.0	24.6		ug/L	98	70 - 130	
Bromodichloromethane	25.0	25.4		ug/L	102	70 - 132	
Bromoform	25.0	25.0		ug/L	100	60 - 148	
Bromomethane	25.0	25.2		ug/L	101	64 - 139	
2-Butanone (MEK)	25.0	23.0		ug/L	92	44 - 150	
Carbon disulfide	25.0	23.8		ug/L	95	52 - 136	
Carbon tetrachloride	25.0	25.9		ug/L	104	60 - 150	
Chlorobenzene	25.0	23.1		ug/L	92	70 - 130	
Chloroethane	25.0	26.6		ug/L	106	64 - 135	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-351362/5**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Chloroform	25.0	25.0		ug/L		100	70 - 130
Chloromethane	25.0	25.8		ug/L		103	47 - 140
2-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130
4-Chlorotoluene	25.0	25.6		ug/L		103	70 - 130
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 133
cis-1,3-Dichloropropene	25.0	25.5		ug/L		102	70 - 133
Dibromochloromethane	25.0	24.5		ug/L		98	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	52 - 140
1,2-Dibromoethane (EDB)	25.0	23.7		ug/L		95	70 - 130
Dibromomethane	25.0	24.6		ug/L		98	70 - 130
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
Dichlorodifluoromethane	25.0	26.6		ug/L		106	29 - 150
1,1-Dichloroethane	25.0	25.1		ug/L		100	64 - 130
1,2-Dichloroethane	25.0	26.2		ug/L		105	57 - 138
1,1-Dichloroethene	25.0	24.1		ug/L		97	70 - 130
1,2-Dichloropropene	25.0	25.5		ug/L		102	67 - 130
1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
2,2-Dichloropropene	25.0	25.9		ug/L		103	68 - 141
1,1-Dichloropropene	25.0	25.7		ug/L		103	70 - 130
Ethylbenzene	25.0	24.2		ug/L		97	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	25.3		ug/L		101	60 - 136
Hexachlorobutadiene	25.0	25.0		ug/L		100	10 - 150
2-Hexanone	25.0	25.0		ug/L		100	10 - 150
Isopropylbenzene	25.0	24.4		ug/L		98	70 - 136
Isopropyl Ether (DIPE)	25.0	27.4		ug/L		109	58 - 139
Methylene Chloride	25.0	25.0		ug/L		100	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	26.0		ug/L		104	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	24.5		ug/L		98	63 - 131
m,p-Xylene	25.0	24.1		ug/L		96	70 - 130
Naphthalene	25.0	24.1		ug/L		96	60 - 140
n-Butylbenzene	25.0	25.2		ug/L		101	65 - 150
N-Propylbenzene	25.0	25.1		ug/L		100	67 - 139
o-Xylene	25.0	24.2		ug/L		97	70 - 130
p-Isopropyltoluene	25.0	24.4		ug/L		97	70 - 132
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 138
Styrene	25.0	24.1		ug/L		96	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	24.6		ug/L		98	57 - 139
tert-Butyl alcohol (TBA)	250	251		ug/L		101	70 - 130
tert-Butylbenzene	25.0	25.0		ug/L		100	70 - 130
1,1,1,2-Tetrachloroethane	25.0	22.8		ug/L		91	60 - 141
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	63 - 130
Tetrachloroethene	25.0	23.4		ug/L		94	70 - 130
Toluene	25.0	24.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	70 - 130
trans-1,3-Dichloropropene	25.0	25.1		ug/L		100	70 - 132
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	60 - 140

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-351362/5**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	60 - 140
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130
1,1,2-Trichloroethane	25.0	23.9		ug/L		95	70 - 130
Trichloroethylene	25.0	24.8		ug/L		99	70 - 130
Trichlorofluoromethane	25.0	27.7		ug/L		111	60 - 150
1,2,3-Trichloropropane	25.0	23.2		ug/L		93	63 - 130
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		101	70 - 135
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		103	70 - 136
Vinyl chloride	25.0	26.1		ug/L		104	59 - 133

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		76 - 132
Toluene-d8 (Surr)	99		80 - 128

**Lab Sample ID: 440-155926-4 MS**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: EMW-5C-720-GW-160816**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	77		50.0	131		ug/L		108	10 - 150
Benzene	ND		50.0	47.0		ug/L		94	66 - 130
Bromobenzene	ND		50.0	46.6		ug/L		93	70 - 130
Bromochloromethane	ND		50.0	46.5		ug/L		93	70 - 130
Bromodichloromethane	ND		50.0	47.3		ug/L		95	70 - 138
Bromoform	ND		50.0	49.2		ug/L		98	59 - 150
Bromomethane	ND		50.0	48.5		ug/L		97	62 - 131
2-Butanone (MEK)	ND		50.0	51.0		ug/L		102	48 - 140
Carbon disulfide	ND		50.0	47.3		ug/L		95	49 - 140
Carbon tetrachloride	ND		50.0	50.2		ug/L		100	60 - 150
Chlorobenzene	ND		50.0	45.4		ug/L		91	70 - 130
Chloroethane	ND		50.0	51.4		ug/L		103	68 - 130
Chloroform	ND		50.0	48.0		ug/L		96	70 - 130
Chloromethane	ND		50.0	49.8		ug/L		100	39 - 144
2-Chlorotoluene	ND		50.0	49.5		ug/L		99	70 - 130
4-Chlorotoluene	ND		50.0	48.5		ug/L		97	70 - 130
cis-1,2-Dichloroethene	ND		50.0	47.6		ug/L		95	70 - 130
cis-1,3-Dichloropropene	ND		50.0	49.5		ug/L		99	70 - 133
Dibromochloromethane	ND		50.0	47.0		ug/L		94	70 - 148
1,2-Dibromo-3-Chloropropane	ND		50.0	49.6		ug/L		99	48 - 140
1,2-Dibromoethane (EDB)	ND		50.0	47.4		ug/L		95	70 - 131
Dibromomethane	ND		50.0	46.4		ug/L		93	70 - 130
1,2-Dichlorobenzene	ND		50.0	46.9		ug/L		94	70 - 130
1,3-Dichlorobenzene	ND		50.0	47.1		ug/L		94	70 - 130
1,4-Dichlorobenzene	ND		50.0	47.2		ug/L		94	70 - 130
Dichlorodifluoromethane	ND		50.0	53.3		ug/L		107	25 - 142
1,1-Dichloroethane	ND		50.0	48.8		ug/L		98	65 - 130
1,2-Dichloroethane	5.1		50.0	53.4		ug/L		97	56 - 146

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155926-4 MS**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: EMW-5C-720-GW-160816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethene	ND		50.0	47.9		ug/L		96	70 - 130
1,2-Dichloropropane	ND		50.0	47.8		ug/L		96	69 - 130
1,3-Dichloropropane	ND		50.0	47.0		ug/L		94	70 - 130
2,2-Dichloropropane	ND		50.0	55.4		ug/L		111	69 - 138
1,1-Dichloropropene	ND		50.0	50.7		ug/L		101	64 - 130
Ethylbenzene	5.7		50.0	53.6		ug/L		96	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		50.0	47.1		ug/L		94	70 - 130
Hexachlorobutadiene	ND		50.0	49.8		ug/L		100	10 - 150
2-Hexanone	ND		50.0	52.3		ug/L		105	10 - 150
Isopropylbenzene	1.4	J	50.0	49.7		ug/L		97	70 - 132
Isopropyl Ether (DIPE)	ND		50.0	50.8		ug/L		102	64 - 138
Methylene Chloride	ND		50.0	47.3		ug/L		95	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.7		ug/L		107	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		50.0	45.8		ug/L		92	70 - 130
m,p-Xylene	4.3		50.0	51.9		ug/L		95	70 - 133
Naphthalene	ND		50.0	48.7		ug/L		97	60 - 140
n-Butylbenzene	ND		50.0	50.4		ug/L		101	61 - 149
N-Propylbenzene	1.3	J	50.0	50.7		ug/L		99	66 - 135
o-Xylene	5.2		50.0	52.0		ug/L		94	70 - 133
p-Isopropyltoluene	ND		50.0	47.9		ug/L		96	70 - 130
sec-Butylbenzene	ND		50.0	48.8		ug/L		98	67 - 134
Styrene	ND		50.0	46.5		ug/L		93	29 - 150
Tert-amyl-methyl ether (TAME)	ND		50.0	45.8		ug/L		92	68 - 133
tert-Butyl alcohol (TBA)	12	J ID	500	509		ug/L		99	70 - 130
tert-Butylbenzene	ND		50.0	48.5		ug/L		97	70 - 130
1,1,1,2-Tetrachloroethane	ND		50.0	44.2		ug/L		88	60 - 149
1,1,2,2-Tetrachloroethane	ND		50.0	46.8		ug/L		94	63 - 130
Tetrachloroethene	ND		50.0	47.5		ug/L		95	70 - 137
Toluene	72		50.0	114		ug/L		83	70 - 130
trans-1,2-Dichloroethene	ND		50.0	48.9		ug/L		98	70 - 130
trans-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	70 - 138
1,2,3-Trichlorobenzene	ND		50.0	47.5		ug/L		95	60 - 140
1,2,4-Trichlorobenzene	ND		50.0	49.3		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		50.0	50.0		ug/L		100	70 - 130
1,1,2-Trichloroethane	ND		50.0	46.6		ug/L		93	70 - 130
Trichloroethene	ND		50.0	48.4		ug/L		97	70 - 130
Trichlorofluoromethane	ND		50.0	54.4		ug/L		109	60 - 150
1,2,3-Trichloropropane	ND		50.0	47.2		ug/L		94	60 - 130
1,2,4-Trimethylbenzene	0.60	J	50.0	49.9		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	ND		50.0	49.5		ug/L		99	70 - 130
Vinyl chloride	ND		50.0	52.0		ug/L		104	50 - 137
<hr/>									
Surrogate		MS	MS						
Surrogate		%Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Surr)		96		80 - 120					
Dibromofluoromethane (Surr)		97		76 - 132					
Toluene-d8 (Surr)		104		80 - 128					

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155926-4 MSD**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: EMW-5C-720-GW-160816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Acetone	77		50.0	120		ug/L		85	10 - 150	9	35
Benzene	ND		50.0	46.7		ug/L		93	66 - 130	1	20
Bromobenzene	ND		50.0	46.8		ug/L		94	70 - 130	0	20
Bromochloromethane	ND		50.0	46.5		ug/L		93	70 - 130	0	25
Bromodichloromethane	ND		50.0	47.7		ug/L		95	70 - 138	1	20
Bromoform	ND		50.0	48.9		ug/L		98	59 - 150	1	25
Bromomethane	ND		50.0	46.8		ug/L		94	62 - 131	3	25
2-Butanone (MEK)	ND		50.0	49.3		ug/L		99	48 - 140	4	40
Carbon disulfide	ND		50.0	45.4		ug/L		91	49 - 140	4	20
Carbon tetrachloride	ND		50.0	49.7		ug/L		99	60 - 150	1	25
Chlorobenzene	ND		50.0	44.9		ug/L		90	70 - 130	1	20
Chloroethane	ND		50.0	50.6		ug/L		101	68 - 130	2	25
Chloroform	ND		50.0	47.4		ug/L		95	70 - 130	1	20
Chloromethane	ND		50.0	49.2		ug/L		98	39 - 144	1	25
2-Chlorotoluene	ND		50.0	49.7		ug/L		99	70 - 130	0	20
4-Chlorotoluene	ND		50.0	49.6		ug/L		99	70 - 130	2	20
cis-1,2-Dichloroethene	ND		50.0	47.9		ug/L		96	70 - 130	1	20
cis-1,3-Dichloropropene	ND		50.0	49.3		ug/L		99	70 - 133	0	20
Dibromochloromethane	ND		50.0	46.9		ug/L		94	70 - 148	0	25
1,2-Dibromo-3-Chloropropane	ND		50.0	46.8		ug/L		94	48 - 140	6	30
1,2-Dibromoethane (EDB)	ND		50.0	46.9		ug/L		94	70 - 131	1	25
Dibromomethane	ND		50.0	45.2		ug/L		90	70 - 130	3	25
1,2-Dichlorobenzene	ND		50.0	46.5		ug/L		93	70 - 130	1	20
1,3-Dichlorobenzene	ND		50.0	47.6		ug/L		95	70 - 130	1	20
1,4-Dichlorobenzene	ND		50.0	46.6		ug/L		93	70 - 130	1	20
Dichlorodifluoromethane	ND		50.0	51.4		ug/L		103	25 - 142	4	30
1,1-Dichloroethane	ND		50.0	47.1		ug/L		94	65 - 130	3	20
1,2-Dichloroethane	5.1		50.0	53.0		ug/L		96	56 - 146	1	20
1,1-Dichloroethene	ND		50.0	46.4		ug/L		93	70 - 130	3	20
1,2-Dichloropropane	ND		50.0	46.9		ug/L		94	69 - 130	2	20
1,3-Dichloropropane	ND		50.0	47.1		ug/L		94	70 - 130	0	25
2,2-Dichloropropane	ND		50.0	52.4		ug/L		105	69 - 138	6	25
1,1-Dichloropropene	ND		50.0	49.6		ug/L		99	64 - 130	2	20
Ethylbenzene	5.7		50.0	53.2		ug/L		95	70 - 130	1	20
Ethyl-t-butyl ether (ETBE)	ND		50.0	46.8		ug/L		94	70 - 130	1	25
Hexachlorobutadiene	ND		50.0	48.9		ug/L		98	10 - 150	2	20
2-Hexanone	ND		50.0	51.1		ug/L		102	10 - 150	2	35
Isopropylbenzene	1.4 J		50.0	50.1		ug/L		97	70 - 132	1	20
Isopropyl Ether (DIPE)	ND		50.0	49.7		ug/L		99	64 - 138	2	25
Methylene Chloride	ND		50.0	47.6		ug/L		95	52 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	52.5		ug/L		105	52 - 150	2	35
Methyl-t-Butyl Ether (MTBE)	ND		50.0	44.9		ug/L		90	70 - 130	2	25
m,p-Xylene	4.3		50.0	52.9		ug/L		97	70 - 133	2	25
Naphthalene	ND		50.0	48.1		ug/L		96	60 - 140	1	30
n-Butylbenzene	ND		50.0	50.8		ug/L		102	61 - 149	1	20
N-Propylbenzene	1.3 J		50.0	50.8		ug/L		99	66 - 135	0	20
o-Xylene	5.2		50.0	52.1		ug/L		94	70 - 133	0	20
p-Isopropyltoluene	ND		50.0	48.1		ug/L		96	70 - 130	0	20

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# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-155926-4 MSD**

**Matrix: Water**

**Analysis Batch: 351362**

**Client Sample ID: EMW-5C-720-GW-160816**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	ND		50.0	48.7		ug/L		97	67 - 134	0	20
Styrene	ND		50.0	46.2		ug/L		92	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		50.0	45.6		ug/L		91	68 - 133	0	30
tert-Butyl alcohol (TBA)	12	J ID	500	507		ug/L		99	70 - 130	0	25
tert-Butylbenzene	ND		50.0	48.6		ug/L		97	70 - 130	0	20
1,1,1,2-Tetrachloroethane	ND		50.0	43.7		ug/L		87	60 - 149	1	20
1,1,2,2-Tetrachloroethane	ND		50.0	45.7		ug/L		91	63 - 130	2	30
Tetrachloroethene	ND		50.0	47.4		ug/L		95	70 - 137	0	20
Toluene	72		50.0	111		ug/L		78	70 - 130	2	20
trans-1,2-Dichloroethene	ND		50.0	47.6		ug/L		95	70 - 130	3	20
trans-1,3-Dichloropropene	ND		50.0	47.7		ug/L		95	70 - 138	3	25
1,2,3-Trichlorobenzene	ND		50.0	47.6		ug/L		95	60 - 140	0	20
1,2,4-Trichlorobenzene	ND		50.0	50.1		ug/L		100	60 - 140	2	20
1,1,1-Trichloroethane	ND		50.0	49.7		ug/L		99	70 - 130	1	20
1,1,2-Trichloroethane	ND		50.0	45.8		ug/L		92	70 - 130	2	25
Trichloroethene	ND		50.0	47.1		ug/L		94	70 - 130	3	20
Trichlorofluoromethane	ND		50.0	52.4		ug/L		105	60 - 150	4	25
1,2,3-Trichloropropane	ND		50.0	45.3		ug/L		91	60 - 130	4	30
1,2,4-Trimethylbenzene	0.60	J	50.0	48.5		ug/L		96	70 - 130	3	25
1,3,5-Trimethylbenzene	ND		50.0	49.2		ug/L		98	70 - 130	1	20
Vinyl chloride	ND		50.0	50.3		ug/L		101	50 - 137	3	30

**MSD MSD**

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	97		76 - 132
Toluene-d8 (Surr)	102		80 - 128

**Lab Sample ID: MB 440-351460/4**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	ND		20	10	ug/L			08/24/16 08:18	1
Benzene	ND		0.50	0.25	ug/L			08/24/16 08:18	1
Bromobenzene	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Bromochloromethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Bromodichloromethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Bromoform	ND		1.0	0.40	ug/L			08/24/16 08:18	1
Bromomethane	ND		2.0	0.25	ug/L			08/24/16 08:18	1
1,3-Butadiene	ND		1.0	0.50	ug/L			08/24/16 08:18	1
2-Butanone (MEK)	ND		10	2.5	ug/L			08/24/16 08:18	1
Carbon disulfide	ND		2.0	0.50	ug/L			08/24/16 08:18	1
Carbon tetrachloride	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/24/16 08:18	1
2-Chloro-1,3-butadiene	ND		2.0	0.50	ug/L			08/24/16 08:18	1
Chloroethane	ND		1.0	0.40	ug/L			08/24/16 08:18	1
Chloroform	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Chloromethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-351460/4**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
2-Chlorotoluene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
4-Chlorotoluene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
cis-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
cis-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Dibromochloromethane	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,2-Dibromo-3-Chloropropane	ND				2.0	0.50	ug/L			08/24/16 08:18	1
1,2-Dibromoethane (EDB)	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Dibromomethane	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,2-Dichlorobenzene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,3-Dichlorobenzene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,4-Dichlorobenzene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Dichlorodifluoromethane	ND				1.0	0.40	ug/L			08/24/16 08:18	1
1,1-Dichloroethane	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,2-Dichloroethane	ND				0.50	0.25	ug/L			08/24/16 08:18	1
1,1-Dichloroethene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,2-Dichloropropene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
2,2-Dichloropropene	ND				1.0	0.40	ug/L			08/24/16 08:18	1
1,1-Dichloropropene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Ethylbenzene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Ethyl-t-butyl ether (ETBE)	ND				2.0	0.25	ug/L			08/24/16 08:18	1
Hexachlorobutadiene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
2-Hexanone	ND				10	2.5	ug/L			08/24/16 08:18	1
Isopropylbenzene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Isopropyl Ether (DIPE)	ND				2.0	0.25	ug/L			08/24/16 08:18	1
Methylene Chloride	ND				5.0	0.88	ug/L			08/24/16 08:18	1
4-Methyl-2-pentanone (MIBK)	ND				10	2.5	ug/L			08/24/16 08:18	1
Methyl-t-Butyl Ether (MTBE)	ND				1.0	0.25	ug/L			08/24/16 08:18	1
m,p-Xylene	ND				1.0	0.50	ug/L			08/24/16 08:18	1
Naphthalene	ND				5.0	0.40	ug/L			08/24/16 08:18	1
n-Butylbenzene	ND				2.0	0.40	ug/L			08/24/16 08:18	1
N-Propylbenzene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
o-Xylene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
p-Isopropyltoluene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
sec-Butylbenzene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
Styrene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Tert-amyl-methyl ether (TAME)	ND				2.0	0.25	ug/L			08/24/16 08:18	1
tert-Butyl alcohol (TBA)	ND				10	5.0	ug/L			08/24/16 08:18	1
tert-Butylbenzene	ND				2.0	0.25	ug/L			08/24/16 08:18	1
1,1,1,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,1,2,2-Tetrachloroethane	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Tetrachloroethene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
Toluene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
trans-1,4-Dichloro-2-butene	ND				5.0	2.5	ug/L			08/24/16 08:18	1
trans-1,2-Dichloroethene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
trans-1,3-Dichloropropene	ND				1.0	0.25	ug/L			08/24/16 08:18	1
1,2,3-Trichlorobenzene	ND				2.0	0.40	ug/L			08/24/16 08:18	1
1,2,4-Trichlorobenzene	ND				2.0	0.40	ug/L			08/24/16 08:18	1

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 440-351460/4**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Trichloroethene	ND		1.0	0.25	ug/L			08/24/16 08:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			08/24/16 08:18	1
1,2,3-Trichloropropane	ND		2.0	0.40	ug/L			08/24/16 08:18	1
1,2,4-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 08:18	1
1,3,5-Trimethylbenzene	ND		2.0	0.25	ug/L			08/24/16 08:18	1
Vinyl chloride	ND		0.50	0.25	ug/L			08/24/16 08:18	1
Xylenes, Total	ND		2.0	0.50	ug/L			08/24/16 08:18	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		80 - 120		08/24/16 08:18	1
Dibromofluoromethane (Surr)	100		76 - 132		08/24/16 08:18	1
Toluene-d8 (Surr)	104		80 - 128		08/24/16 08:18	1

**Lab Sample ID: LCS 440-351460/5**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	25.0	24.4		ug/L		97	10 - 150
Benzene	25.0	23.6		ug/L		94	68 - 130
Bromobenzene	25.0	23.5		ug/L		94	70 - 130
Bromochloromethane	25.0	24.3		ug/L		97	70 - 130
Bromodichloromethane	25.0	25.1		ug/L		100	70 - 132
Bromoform	25.0	24.4		ug/L		98	60 - 148
Bromomethane	25.0	24.8		ug/L		99	64 - 139
2-Butanone (MEK)	25.0	22.7		ug/L		91	44 - 150
Carbon disulfide	25.0	23.6		ug/L		94	52 - 136
Carbon tetrachloride	25.0	25.3		ug/L		101	60 - 150
Chlorobenzene	25.0	22.9		ug/L		92	70 - 130
Chloroethane	25.0	26.0		ug/L		104	64 - 135
Chloroform	25.0	24.5		ug/L		98	70 - 130
Chloromethane	25.0	25.5		ug/L		102	47 - 140
2-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130
4-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	70 - 133
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	70 - 133
Dibromochloromethane	25.0	24.1		ug/L		96	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	21.9		ug/L		88	52 - 140
1,2-Dibromoethane (EDB)	25.0	23.3		ug/L		93	70 - 130
Dibromomethane	25.0	24.0		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	26.2		ug/L		105	29 - 150
1,1-Dichloroethane	25.0	24.5		ug/L		98	64 - 130
1,2-Dichloroethane	25.0	25.6		ug/L		102	57 - 138

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 440-351460/5**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec	Limits	5
	Added	Result	Qualifier	LCS					
1,1-Dichloroethene	25.0	24.0		ug/L		96	70 - 130		6
1,2-Dichloropropane	25.0	25.1		ug/L		101	67 - 130		7
1,3-Dichloropropane	25.0	23.7		ug/L		95	70 - 130		8
2,2-Dichloropropane	25.0	26.9		ug/L		108	68 - 141		9
1,1-Dichloropropene	25.0	25.0		ug/L		100	70 - 130		10
Ethylbenzene	25.0	24.0		ug/L		96	70 - 130		11
Ethyl-t-butyl ether (ETBE)	25.0	25.1		ug/L		100	60 - 136		12
Hexachlorobutadiene	25.0	24.6		ug/L		98	10 - 150		13
2-Hexanone	25.0	23.4		ug/L		94	10 - 150		
Isopropylbenzene	25.0	24.2		ug/L		97	70 - 136		
Isopropyl Ether (DIPE)	25.0	27.2		ug/L		109	58 - 139		
Methylene Chloride	25.0	24.3		ug/L		97	52 - 130		
4-Methyl-2-pentanone (MIBK)	25.0	24.0		ug/L		96	59 - 149		
Methyl-t-Butyl Ether (MTBE)	25.0	23.6		ug/L		94	63 - 131		
m,p-Xylene	25.0	24.5		ug/L		98	70 - 130		
Naphthalene	25.0	22.8		ug/L		91	60 - 140		
n-Butylbenzene	25.0	24.8		ug/L		99	65 - 150		
N-Propylbenzene	25.0	24.4		ug/L		97	67 - 139		
o-Xylene	25.0	24.0		ug/L		96	70 - 130		
p-Isopropyltoluene	25.0	23.7		ug/L		95	70 - 132		
sec-Butylbenzene	25.0	23.8		ug/L		95	70 - 138		
Styrene	25.0	24.1		ug/L		97	70 - 134		
Tert-amyl-methyl ether (TAME)	25.0	24.4		ug/L		97	57 - 139		
tert-Butyl alcohol (TBA)	250	252		ug/L		101	70 - 130		
tert-Butylbenzene	25.0	24.0		ug/L		96	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	22.6		ug/L		91	60 - 141		
1,1,2,2-Tetrachloroethane	25.0	22.2		ug/L		89	63 - 130		
Tetrachloroethene	25.0	23.1		ug/L		93	70 - 130		
Toluene	25.0	24.0		ug/L		96	70 - 130		
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130		
trans-1,3-Dichloropropene	25.0	24.6		ug/L		99	70 - 132		
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	60 - 140		
1,2,4-Trichlorobenzene	25.0	25.0		ug/L		100	60 - 140		
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	70 - 130		
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 130		
Trichloroethene	25.0	24.0		ug/L		96	70 - 130		
Trichlorofluoromethane	25.0	26.8		ug/L		107	60 - 150		
1,2,3-Trichloropropane	25.0	21.5		ug/L		86	63 - 130		
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	70 - 135		
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	70 - 136		
Vinyl chloride	25.0	25.8		ug/L		103	59 - 133		

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		76 - 132
Toluene-d8 (Surr)	100		80 - 128

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-156164-A-2 MS**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	24.4		ug/L	98	10 - 150	
Benzene	ND		25.0	23.2		ug/L	93	66 - 130	
Bromobenzene	ND		25.0	22.4		ug/L	90	70 - 130	
Bromochloromethane	ND		25.0	23.9		ug/L	96	70 - 130	
Bromodichloromethane	ND		25.0	24.5		ug/L	98	70 - 138	
Bromoform	ND		25.0	24.8		ug/L	99	59 - 150	
Bromomethane	ND		25.0	24.1		ug/L	97	62 - 131	
2-Butanone (MEK)	ND		25.0	22.1		ug/L	88	48 - 140	
Carbon disulfide	ND		25.0	23.2		ug/L	93	49 - 140	
Carbon tetrachloride	ND		25.0	25.1		ug/L	101	60 - 150	
Chlorobenzene	ND		25.0	22.4		ug/L	90	70 - 130	
Chloroethane	ND		25.0	25.2		ug/L	101	68 - 130	
Chloroform	ND		25.0	24.2		ug/L	97	70 - 130	
Chloromethane	ND		25.0	25.1		ug/L	101	39 - 144	
2-Chlorotoluene	ND		25.0	23.4		ug/L	94	70 - 130	
4-Chlorotoluene	ND		25.0	23.8		ug/L	95	70 - 130	
cis-1,2-Dichloroethene	ND		25.0	24.4		ug/L	97	70 - 130	
cis-1,3-Dichloropropene	ND		25.0	25.1		ug/L	100	70 - 133	
Dibromochloromethane	ND		25.0	24.2		ug/L	97	70 - 148	
1,2-Dibromo-3-Chloropropane	ND		25.0	22.1		ug/L	88	48 - 140	
1,2-Dibromoethane (EDB)	ND		25.0	23.8		ug/L	95	70 - 131	
Dibromomethane	ND		25.0	23.5		ug/L	94	70 - 130	
1,2-Dichlorobenzene	ND		25.0	22.7		ug/L	91	70 - 130	
1,3-Dichlorobenzene	ND		25.0	23.1		ug/L	92	70 - 130	
1,4-Dichlorobenzene	ND		25.0	22.9		ug/L	92	70 - 130	
Dichlorodifluoromethane	ND		25.0	24.6		ug/L	98	25 - 142	
1,1-Dichloroethane	ND		25.0	24.0		ug/L	96	65 - 130	
1,2-Dichloroethane	ND		25.0	25.4		ug/L	102	56 - 146	
1,1-Dichloroethene	ND		25.0	22.3		ug/L	89	70 - 130	
1,2-Dichloropropane	ND		25.0	24.5		ug/L	98	69 - 130	
1,3-Dichloropropane	ND		25.0	23.4		ug/L	93	70 - 130	
2,2-Dichloropropane	ND		25.0	28.0		ug/L	112	69 - 138	
1,1-Dichloropropene	ND		25.0	24.6		ug/L	99	64 - 130	
Ethylbenzene	ND		25.0	23.5		ug/L	94	70 - 130	
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.0		ug/L	100	70 - 130	
Hexachlorobutadiene	ND		25.0	24.2		ug/L	97	10 - 150	
2-Hexanone	ND		25.0	23.9		ug/L	95	10 - 150	
Isopropylbenzene	ND		25.0	24.0		ug/L	96	70 - 132	
Isopropyl Ether (DIPE)	ND		25.0	26.6		ug/L	106	64 - 138	
Methylene Chloride	ND		25.0	24.0		ug/L	96	52 - 130	
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.5		ug/L	98	52 - 150	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.8		ug/L	95	70 - 130	
m,p-Xylene	ND		25.0	23.5		ug/L	94	70 - 133	
Naphthalene	ND		25.0	23.0		ug/L	92	60 - 140	
n-Butylbenzene	ND		25.0	24.3		ug/L	97	61 - 149	
N-Propylbenzene	ND		25.0	23.2		ug/L	93	66 - 135	
o-Xylene	ND		25.0	23.5		ug/L	94	70 - 133	
p-Isopropyltoluene	ND		25.0	23.2		ug/L	93	70 - 130	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-156164-A-2 MS**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
sec-Butylbenzene	ND		25.0	23.5		ug/L		94	67 - 134
Styrene	ND		25.0	23.1		ug/L		93	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	23.7		ug/L		95	68 - 133
tert-Butyl alcohol (TBA)	ND		250	247		ug/L		99	70 - 130
tert-Butylbenzene	ND		25.0	23.3		ug/L		93	70 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	22.2		ug/L		89	60 - 149
1,1,2,2-Tetrachloroethane	ND		25.0	22.1		ug/L		88	63 - 130
Tetrachloroethene	ND		25.0	23.1		ug/L		92	70 - 137
Toluene	ND		25.0	23.3		ug/L		93	70 - 130
trans-1,2-Dichloroethene	ND		25.0	24.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	ND		25.0	24.8		ug/L		99	70 - 138
1,2,3-Trichlorobenzene	ND		25.0	23.6		ug/L		95	60 - 140
1,2,4-Trichlorobenzene	ND		25.0	24.8		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		25.0	26.4		ug/L		106	70 - 130
1,1,2-Trichloroethane	ND		25.0	23.4		ug/L		94	70 - 130
Trichloroethene	3.2		25.0	26.8		ug/L		94	70 - 130
Trichlorofluoromethane	ND		25.0	26.4		ug/L		106	60 - 150
1,2,3-Trichloropropane	ND		25.0	21.2		ug/L		85	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130
Vinyl chloride	ND		25.0	25.1		ug/L		101	50 - 137
<b>MS MS</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>					
4-Bromofluorobenzene (Surr)	97			80 - 120					
Dibromofluoromethane (Surr)	100			76 - 132					
Toluene-d8 (Surr)	101			80 - 128					

**Lab Sample ID: 440-156164-A-2 MSD**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone	ND		25.0	23.8		ug/L		95	10 - 150
Benzene	ND		25.0	22.9		ug/L		91	66 - 130
Bromobenzene	ND		25.0	22.7		ug/L		91	70 - 130
Bromochloromethane	ND		25.0	24.3		ug/L		97	70 - 130
Bromodichloromethane	ND		25.0	24.3		ug/L		97	70 - 138
Bromoform	ND		25.0	24.6		ug/L		99	59 - 150
Bromomethane	ND		25.0	24.2		ug/L		97	62 - 131
2-Butanone (MEK)	ND		25.0	21.9		ug/L		88	48 - 140
Carbon disulfide	ND		25.0	22.4		ug/L		89	49 - 140
Carbon tetrachloride	ND		25.0	24.4		ug/L		97	60 - 150
Chlorobenzene	ND		25.0	22.5		ug/L		90	70 - 130
Chloroethane	ND		25.0	24.9		ug/L		99	68 - 130
Chloroform	ND		25.0	24.0		ug/L		96	70 - 130
Chloromethane	ND		25.0	24.3		ug/L		97	39 - 144
2-Chlorotoluene	ND		25.0	23.7		ug/L		95	70 - 130
4-Chlorotoluene	ND		25.0	23.8		ug/L		95	70 - 130
									RPD Limit

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-156164-A-2 MSD**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
cis-1,2-Dichloroethene	ND		25.0	24.2		ug/L	97	70 - 130	1	20	
cis-1,3-Dichloropropene	ND		25.0	25.4		ug/L	102	70 - 133	1	20	
Dibromochloromethane	ND		25.0	23.9		ug/L	95	70 - 148	2	25	
1,2-Dibromo-3-Chloropropane	ND		25.0	22.1		ug/L	88	48 - 140	0	30	
1,2-Dibromoethane (EDB)	ND		25.0	23.5		ug/L	94	70 - 131	1	25	
Dibromomethane	ND		25.0	23.4		ug/L	94	70 - 130	1	25	
1,2-Dichlorobenzene	ND		25.0	23.0		ug/L	92	70 - 130	1	20	
1,3-Dichlorobenzene	ND		25.0	23.2		ug/L	93	70 - 130	1	20	
1,4-Dichlorobenzene	ND		25.0	22.5		ug/L	90	70 - 130	2	20	
Dichlorodifluoromethane	ND		25.0	23.6		ug/L	94	25 - 142	4	30	
1,1-Dichloroethane	ND		25.0	23.8		ug/L	95	65 - 130	1	20	
1,2-Dichloroethane	ND		25.0	25.3		ug/L	101	56 - 146	0	20	
1,1-Dichloroethene	ND		25.0	22.0		ug/L	88	70 - 130	2	20	
1,2-Dichloropropane	ND		25.0	24.5		ug/L	98	69 - 130	0	20	
1,3-Dichloropropane	ND		25.0	23.3		ug/L	93	70 - 130	0	25	
2,2-Dichloropropane	ND		25.0	27.1		ug/L	108	69 - 138	3	25	
1,1-Dichloropropene	ND		25.0	24.1		ug/L	96	64 - 130	2	20	
Ethylbenzene	ND		25.0	22.9		ug/L	92	70 - 130	3	20	
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.5		ug/L	98	70 - 130	2	25	
Hexachlorobutadiene	ND		25.0	24.0		ug/L	96	10 - 150	1	20	
2-Hexanone	ND		25.0	23.9		ug/L	96	10 - 150	0	35	
Isopropylbenzene	ND		25.0	23.6		ug/L	94	70 - 132	2	20	
Isopropyl Ether (DIPE)	ND		25.0	26.1		ug/L	105	64 - 138	2	25	
Methylene Chloride	ND		25.0	23.6		ug/L	94	52 - 130	2	20	
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.8		ug/L	99	52 - 150	1	35	
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.9		ug/L	96	70 - 130	1	25	
m,p-Xylene	ND		25.0	23.4		ug/L	93	70 - 133	1	25	
Naphthalene	ND		25.0	23.1		ug/L	93	60 - 140	1	30	
n-Butylbenzene	ND		25.0	23.9		ug/L	96	61 - 149	2	20	
N-Propylbenzene	ND		25.0	23.3		ug/L	93	66 - 135	1	20	
o-Xylene	ND		25.0	23.1		ug/L	92	70 - 133	2	20	
p-Isopropyltoluene	ND		25.0	22.8		ug/L	91	70 - 130	2	20	
sec-Butylbenzene	ND		25.0	23.1		ug/L	92	67 - 134	2	20	
Styrene	ND		25.0	23.0		ug/L	92	29 - 150	1	35	
Tert-amyl-methyl ether (TAME)	ND		25.0	23.7		ug/L	95	68 - 133	0	30	
tert-Butyl alcohol (TBA)	ND		250	242		ug/L	97	70 - 130	2	25	
tert-Butylbenzene	ND		25.0	22.6		ug/L	91	70 - 130	3	20	
1,1,1,2-Tetrachloroethane	ND		25.0	22.1		ug/L	88	60 - 149	0	20	
1,1,2,2-Tetrachloroethane	ND		25.0	21.8		ug/L	87	63 - 130	1	30	
Tetrachloroethene	ND		25.0	22.7		ug/L	91	70 - 137	1	20	
Toluene	ND		25.0	23.2		ug/L	93	70 - 130	1	20	
trans-1,2-Dichloroethene	ND		25.0	24.0		ug/L	96	70 - 130	0	20	
trans-1,3-Dichloropropene	ND		25.0	24.8		ug/L	99	70 - 138	0	25	
1,2,3-Trichlorobenzene	ND		25.0	23.5		ug/L	94	60 - 140	1	20	
1,2,4-Trichlorobenzene	ND		25.0	24.6		ug/L	98	60 - 140	1	20	
1,1,1-Trichloroethane	ND		25.0	25.6		ug/L	102	70 - 130	3	20	
1,1,2-Trichloroethane	ND		25.0	23.1		ug/L	92	70 - 130	1	25	
Trichloroethene	3.2		25.0	26.5		ug/L	93	70 - 130	1	20	

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-156164-A-2 MSD**

**Matrix: Water**

**Analysis Batch: 351460**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Trichlorofluoromethane	ND		25.0	25.8		ug/L		103	60 - 150	2	25
1,2,3-Trichloropropane	ND		25.0	21.1		ug/L		84	60 - 130	0	30
1,2,4-Trimethylbenzene	ND		25.0	23.4		ug/L		93	70 - 130	0	25
1,3,5-Trimethylbenzene	ND		25.0	23.4		ug/L		94	70 - 130	0	20
Vinyl chloride	ND		25.0	23.8		ug/L		95	50 - 137	5	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	101		76 - 132
Toluene-d8 (Surr)	102		80 - 128

## Method: 314.0 - Perchlorate (IC)

**Lab Sample ID: MB 550-96930/4**

**Matrix: Water**

**Analysis Batch: 96930**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		1.0	0.28	ug/L			08/26/16 19:39	1

**Lab Sample ID: LCS 550-96930/5**

**Matrix: Water**

**Analysis Batch: 96930**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Perchlorate	25.0	25.5		ug/L		102	85 - 115		

**Lab Sample ID: LCSD 550-96930/6**

**Matrix: Water**

**Analysis Batch: 96930**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Perchlorate	25.0	25.8		ug/L		103	85 - 115	1	15

**Lab Sample ID: 440-155926-4 MS**

**Matrix: Water**

**Analysis Batch: 96930**

**Client Sample ID: EMW-5C-720-GW-160816**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Perchlorate	ND		25.0	24.3		ug/L		97	80 - 120		

**Lab Sample ID: 440-155926-4 MSD**

**Matrix: Water**

**Analysis Batch: 96930**

**Client Sample ID: EMW-5C-720-GW-160816**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Perchlorate	ND		25.0	25.7		ug/L		103	80 - 120	5	15

TestAmerica Irvine

# QC Sample Results

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## Method: 314.0 - Perchlorate (IC) (Continued)

**Lab Sample ID:** MB 550-97083/4

**Matrix:** Water

**Analysis Batch:** 97083

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perchlorate	ND		1.0	0.28	ug/L			08/29/16 17:21	1

**Lab Sample ID:** LCS 550-97083/5

**Matrix:** Water

**Analysis Batch:** 97083

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec.		RPD	Limit
	Added	Result	Qualifier			%Rec.	Limits		
Perchlorate	25.0	23.9		ug/L		96	85 - 115		

**Lab Sample ID:** LCSD 550-97083/6

**Matrix:** Water

**Analysis Batch:** 97083

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.		RPD	Limit
	Added	Result	Qualifier			%Rec.	Limits		
Perchlorate	25.0	23.9		ug/L		96	85 - 115	0	15

**Lab Sample ID:** 440-156376-B-2 MS

**Matrix:** Water

**Analysis Batch:** 97083

**Client Sample ID:** Matrix Spike

**Prep Type:** Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec.	Limits		
Perchlorate	0.73	J	25.0	24.1		ug/L		94	80 - 120		

**Lab Sample ID:** 440-156376-B-2 MSD

**Matrix:** Water

**Analysis Batch:** 97083

**Client Sample ID:** Matrix Spike Duplicate

**Prep Type:** Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec.	Limits		
Perchlorate	0.73	J	25.0	23.9		ug/L		93	80 - 120	1	15

TestAmerica Irvine

# QC Association Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

## GC/MS VOA

### Analysis Batch: 351362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155926-2	PW-2-485-GW-160816	Total/NA	Water	8260B	
440-155926-3	EB-LW-160816	Total/NA	Water	8260B	
440-155926-4	EMW-5C-720-GW-160816	Total/NA	Water	8260B	
440-155926-5	EMW-5B-615-GW-160816	Total/NA	Water	8260B	
MB 440-351362/4	Method Blank	Total/NA	Water	8260B	
LCS 440-351362/5	Lab Control Sample	Total/NA	Water	8260B	
440-155926-4 MS	EMW-5C-720-GW-160816	Total/NA	Water	8260B	
440-155926-4 MSD	EMW-5C-720-GW-160816	Total/NA	Water	8260B	

### Analysis Batch: 351460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155926-1	TB-LW-160816	Total/NA	Water	8260B	
440-155926-5 - RA	EMW-5B-615-GW-160816	Total/NA	Water	8260B	
440-155926-6	EMW-5A-450-GW-160816	Total/NA	Water	8260B	
440-155926-7	EMW-3C-640-GW-160816	Total/NA	Water	8260B	
440-155926-8	EMW-3B-559-GW-160816	Total/NA	Water	8260B	
440-155926-9	EMW-3B-559-GW-160816-D	Total/NA	Water	8260B	
440-155926-10	EMW-3A-418-GW-160816	Total/NA	Water	8260B	
MB 440-351460/4	Method Blank	Total/NA	Water	8260B	
LCS 440-351460/5	Lab Control Sample	Total/NA	Water	8260B	
440-156164-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-156164-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

## HPLC/IC

### Analysis Batch: 96930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155926-3	EB-LW-160816	Total/NA	Water	314.0	
440-155926-4	EMW-5C-720-GW-160816	Total/NA	Water	314.0	
440-155926-5	EMW-5B-615-GW-160816	Total/NA	Water	314.0	
440-155926-7	EMW-3C-640-GW-160816	Total/NA	Water	314.0	
440-155926-8	EMW-3B-559-GW-160816	Total/NA	Water	314.0	
440-155926-9	EMW-3B-559-GW-160816-D	Total/NA	Water	314.0	
440-155926-10	EMW-3A-418-GW-160816	Total/NA	Water	314.0	
MB 550-96930/4	Method Blank	Total/NA	Water	314.0	
LCS 550-96930/5	Lab Control Sample	Total/NA	Water	314.0	
LCSD 550-96930/6	Lab Control Sample Dup	Total/NA	Water	314.0	
440-155926-4 MS	EMW-5C-720-GW-160816	Total/NA	Water	314.0	
440-155926-4 MSD	EMW-5C-720-GW-160816	Total/NA	Water	314.0	

### Analysis Batch: 97083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-155926-2	PW-2-485-GW-160816	Total/NA	Water	314.0	
440-155926-6	EMW-5A-450-GW-160816	Total/NA	Water	314.0	
MB 550-97083/4	Method Blank	Total/NA	Water	314.0	
LCS 550-97083/5	Lab Control Sample	Total/NA	Water	314.0	
LCSD 550-97083/6	Lab Control Sample Dup	Total/NA	Water	314.0	
440-156376-B-2 MS	Matrix Spike	Total/NA	Water	314.0	
440-156376-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0	

TestAmerica Irvine

## Definitions/Glossary

Client: AECOM, Inc.  
Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ID	Analyte identified by RT & presence of single mass ion

### Glossary

#### Abbreviation **These commonly used abbreviations may or may not be present in this report.**

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Certification Summary

Client: AECOM, Inc.

Project/Site: RFF Rialto Treatment, 60438759

TestAmerica Job ID: 440-155926-1

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 12.002r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-16 *
Nevada	State Program	9	CA015312016-2	07-31-17 *
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-09-00080	07-08-18
Washington	State Program	10	C900	09-03-16

### Laboratory: TestAmerica Phoenix

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	ELLAP		154268	02-01-17
AIHA-LAP, LLC	IHLAP		154268	07-01-17
Arizona	State Program	9	AZ0728	06-09-17
California	State Program	9	2941	11-30-17
Nevada	State Program	9	AZ01030	07-31-17
Oregon	NELAP	10	AZ100001	03-09-17
USDA	Federal		P330-09-00024	09-18-16 *

\* Certification renewal pending - certification considered valid.

**BLAINE**

TECH SERVICES, INC.

SAN JOSE, CALIFORNIA 95112-1105  
PHONE (408) 573-0555  
FAX (408) 573-7771

CONDUCT ANALYSIS TO DETECT

LAB - Test America  
Billing Information:

COC / of 2

CHAIN OF CUSTODY  
CLIENT AECOM  
SITE Rockets, Fireworks, and Flares  
Rialto, CA

CONTAINERS

SAMPLE ID.	DATE	TIME	MATRIX #	ADDL INFORMATION
TB-LW-160816	08/16/16	0700	LW	X
PW-2-485-GW-160816	08/16/16	0735	GW	X X
EB-LW-160816	08/16/16	0750	LW	X X
EW-5C-72D-6W-160816	08/16/16	0810	GW	X X
EW-5C-72D-6W-160816-D	08/16/16	0810	GW	X X
EW-5B-615-GW-160816	08/16/16	0825	GW	X X
EW-5A-45D-GW-160816	08/16/16	0835	GW	X X
EW-3L-64D-GW-160816	08/16/16	0910	GW	X X
EW-3B-559-GW-160816	08/16/16	0925	GW	X X
EW-3B-559-GW-160816-D	08/16/16	0930	GW	X X
SAMPLING COMPLETED	DATE 08/16/16	TIME 0950	PERFORMED BY TR/DR	RESULTS NEEDED NO LATER THAN
RELEASED BY		TIME 8/16/16 / 600	RECEIVED BY	TIME 1600
RELEASED BY		TIME 8/17/16 / 1540	RECEIVED BY	TIME 8/17/16 / 1540
RELEASED BY		TIME 8/17/16 / 1720	RECEIVED BY	TIME 8/17/16 / 1720
SHIPPED VIA		TIME SENT	COOLER #	



440-155926 Chain of Custody

1  
2  
3  
4  
5  
6  
7  
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12  
13

**BLAINE**  
TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
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PHONE (408) 573-0555

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**LAB - Test America**

COC of ✓

**TestAmerica Irvine**  
17461 Derian Ave Suite 100

17461 Derian Ave Suite 100  
Irvine, CA 92614-5817  
Phone (949) 261-1022 Fax (949) 260-3297

## Chain of Custody Record



TestAmerica

1 2 3 4 5 6 7 8 9 10 11 12 13

**TestAmerica Irvine**  
17461 Derian Ave Suite 100  
Irvine, CA 92614-5817  
Phone (949) 261-1022 Fax (949) 260-3297

## Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

**Client Information (Sub Contract Lab)**

Client Contact:  
Shipping/Receiving  
Company:  
TestAmerica Laboratories, Inc

Sampler: \_\_\_\_\_  
Address: 4625 East Cotton Ctr Blvd, Suite 189,  
City: Phoenix  
State, Zip: AZ, 85040  
Phone: 602-437-3340(Tel) 602-454-9303(Fax)  
Email: WO#:  
Project Name: RFF Rialto Treatment, 60438759  
Site: \_\_\_\_\_

Lab PM: Mata, Patty  
Carrier Tracking No(s):  
E-Mail: patty.mata@testamericainc.com  
Job #: 440-155681-1  
COC No: 440-101393-2  
Page: Page 2 of 2

**Analysis Requested**

Due Date Requested: 8/25/2015  
TAI Requested (days):  
PO #:  
SSOW#:

Preservation Codes:  
A - HCL M - Hexane  
B - NaOH N - None  
C - Zn Acetate O - AsNaO2  
D - Nitric Acid P - Na2O4S  
E - NaHSO4 Q - Na2SO3  
F - MeOH R - K2SO4  
G - Anchor S - TSP  
H - Ascorbic Acid T - TSP Dodecahydrate  
I - Ice U - Acetone  
J - DI Water V - MCAA  
K - EDTA W - pH 4-5  
L - EDA X -  
Other: Z - other (specify)

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

Total Number of containers

Special Instructions/Note:

**Sample Identification - Client ID (Lab ID)**

Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (water, solid, oil, wastewater, Aerial)	BT (Issue Amt/ltr)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
EPA-MW9B-725-GW-150816 (440-155681-11)	8/15/16	09:50 Pacific	Water		X				1	
EPA-MW9A-530-GW-150816 (440-155681-12)	8/15/16	10:05 Pacific	Water		X				1	
EPA-MW9A-530-GW-150816-D (440-155681-13)	8/15/16	10:10 Pacific	Water		X				1	
Rialto-2-990-GW-150816 (440-155681-14)	8/15/16	11:00 Pacific	Water		X				1	
EMW-4C-690-GW-150816 (440-155681-15)	8/15/16	12:20 Pacific	Water		X				1	
EMW-4B-605-GW-150816 (440-155681-16)	8/15/16	12:30 Pacific	Water		X				1	
EMW-4A-450-GW-150816 (440-155681-17)	8/15/16	12:45 Pacific	Water		X				1	

### Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For Months

Empty Kit Relinquished by:

Date: 11/17/00

Time: \_\_\_\_\_

Method of Shipment:

Company: \_\_\_\_\_

Received by: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_

Released by: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_

Relinquished by:

Date: 11/17/00

Time: \_\_\_\_\_

Method of Shipment:

Company: \_\_\_\_\_

Received by: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_

Released by: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_

Custody Seals Intact:

Custody Seal No: \_\_\_\_\_

△ Yes

△ No

Cooler Temperature(s) °C and Other Remarks: 1 - 2 - C

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155926-1

**Login Number: 155926**

**List Source: TestAmerica Irvine**

**List Number: 1**

**Creator: Escalante, Maria I**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 440-155926-1

**Login Number:** 155926

**List Source:** TestAmerica Phoenix

**List Number:** 2

**List Creation:** 08/19/16 10:25 AM

**Creator:** Doerr, Bret C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

**Appendix D**

**Data Validation Reports**

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**TO:** Rebecca Mora, Project Manager                   **FILE:** 60438759.900.927  
**FROM:** Lily Bayati, Senior Project Chemist           **SITE:** RFF SAOU  
**DATE:** September 12, 2016  
**SUBJECT:** Summary of Data Validation for TestAmerica Reports: 440-153478, 440-155030, 440-155061, 440-155254, 440-155537, 440-155681, and 440-155926

### Introduction

This report summarizes the findings of the limited data validation (completeness check) of 55 groundwater samples (including seven field duplicates), seven trip blanks, and six equipment blanks. These samples were collected between July 22, and August 16, 2016 as part of the Rockets, Fireworks, and Flares Site South Area Operable Unit (RFF SAOU; formerly the B.F. Goodrich Superfund Site). TestAmerica Laboratories, Inc. (TestAmerica) in Irvine, California performed all analyses. The samples are listed in Table 1 included at the end of this document. The data were reviewed in accordance with AECOM Standard Operating Procedures, USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods (EPA SW-846), and the principles presented in *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (EPA, 2014), and *USEPA National Functional Guidelines for Laboratory Data Review, Inorganics* (EPA, 2014).

### Executive Summary

All samples were analyzed as requested and all holding times were met. Due to matrix interferences, the results for perchlorate for eight samples were qualified as estimated ("UJ/J"). In addition, due to field duplicate imprecision, the results for perchlorate and toluene for one field duplicate pair were qualified as estimated ("J"). No other data were qualified. Overall, based on this limited validation covering the QC parameters listed below, the data as qualified are useable for their intended purpose.

### Data Review Narratives

Fifty-five groundwater samples and six equipment blanks (EBs) were collectively analyzed for volatile organic compounds (VOCs; EPA method 8260B) and perchlorate (EPA method 314.0). In addition, seven trip blanks (TBs) were analyzed for VOCs (EPA method 8260B). The laboratory data were reviewed to evaluate compliance with these methods and the quality of the data reported. This data review process did not include result recalculation or transcription error checking from the raw data. The following summarizes the results of this review.

The areas of review are listed below. A check mark (✓) indicates an area of review in which all data were acceptable. A crossed circle (✗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Data Completeness
- ✓ Holding Times and Preservation
- ✓ Blanks
- ✓ System Monitoring Compounds (Surrogates)
- ✓ Laboratory Control Samples (LCSSs)

- Matrix Spike/Matrix Spike Duplicate Samples (MSs/MSDs)
- Field Duplicates
- Analyte Identification and Quantitation

1. Overall Assessment

The data reported in this package, as qualified, are considered to be usable for meeting project objectives. All results are considered to be valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for the project is 100%. Additionally, because all samples in this data set were collected and analyzed under similar prescribed conditions, the data within this set are considered to be comparable.

2. Data Completeness

All analyses were performed as requested on the chain-of-custody (COC) forms. The laboratory reported all requested analyses and the deliverable data reports were complete.

3. Holding Times and Preservation

All analyses were performed within the method-specified holding times and all samples were collected and preserved appropriately.

4. Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed. Target analytes were either not detected in the associated method blanks, EBs and TBs or did not require data qualification.

5. System Monitoring Compounds (Surrogates)

Appropriate numbers of surrogate compounds were spiked into each sample for EPA 8260B analyses. All surrogate compound recoveries were within laboratory's statistically determined acceptance ranges.

6. Laboratory Control Samples (LCSs)

LCSs were prepared and analyzed at the proper frequency for each analysis. All LCS and LCS duplicate (LCSD) recoveries reported and relative percent differences (RPDs) between LCS/LCSD results (for applicable analytical batches) were within laboratory's statistically determined acceptance ranges. The LCS results indicate that the level of accuracy and precision demonstrated by each analytical method with respect to a clean sample matrix is acceptable.

7. Matrix Spike/Matrix Spike Duplicate Samples (MSs/MSDs)

Several project samples were utilized for MS/MSD analyses. All MS/MSD recoveries reported and relative percent differences (RPDs) between the results were either within laboratory's acceptance ranges or did not require data qualification with the exception listed in the following table. MS/MSD recovery limits do not apply when the sample concentration is  $\geq 4x$  the spike added (as indicated in *National Functional Guidelines*). In addition, batch or non-project MS/MSD data were not evaluated.

Method	Sample	Analyte	Average Recovery	RPD	Qualified Samples	Qualifier
EPA 314.0	PZ-3S-550-GW-220716	Perchlorate	63%*	1	<b>PZ-3D-850-GW-220716</b> <b>PZ-3S-550-GW-220716</b> <b>PZ-2D-700-GW-220716</b> <b>PZ-2S-510-GW-220716</b> <b>AB-W-220716</b> <b>PZ-1D-700-GW-220716</b> <b>PZ-1D-700-GW-220716-D</b> <b>PZ-1S-510-GW-220716</b>	J/UJ

Note: \* Outlier

Perchlorate MS/MSD % Recovery Acceptance Range: 80-120%

8. Field Duplicates

The following project samples were submitted to the laboratory as blind field duplicate pairs.

Primary Sample	Field Duplicate
PZ-1D-700-GW-220716	PZ-1D-700-GW-220716-D
PW-5D-GW-090816	PW-5D-GW-090816-D
PW-7C-GW-080816	PW-7C-GW-080816-D
EMW-1A-470-GW-150816	EMW-1A-470-GW-150816-D
EMW-6D-584-GW-150816	EMW-6D-584-GW-150816-D
EPA-MW9A-GW-150816	EPA-MW9A-GW-150816-D
EMW-3B-559-GW-160816	EMW-3B-559-GW-160816-D

Acceptable field and analytical precision was demonstrated for all analytes for all field duplicate pairs with the following exceptions.

Field Duplicate Pair	Analyte	RPD	Qualifier
<b>EPA-MW9A-530-GW-150816/</b> <b>EPA-MW9A-530-GW-150816-D</b>	Perchlorate	43	<b>J</b>
	Toluene	56	

Note: Field duplicate RPD was compared to a criterion of  $\leq 40\%$

9. Analyte Identification and Quantitation

All analytes reported and the detection limits obtained comply with project specifications.  
All dilutions were appropriate.

Table I  
TestAmerica Laboratories, Inc.

Client Sample	SDG	Laboratory Number	Date Sampled	Analyses Performed
PZ-3D-850-GW-220716	440-153478	440-153478-1	7/22/16	EPA 314.0, 8260B
PZ-3S-550-GW-220716	440-153478	440-153478-2	7/22/16	EPA 314.0, 8260B
PZ-2D-700-GW-220716	440-153478	440-153478-3	7/22/16	EPA 314.0, 8260B
PZ-2S-510-GW-220716	440-153478	440-153478-4	7/22/16	EPA 314.0, 8260B
AB-W-220716	440-153478	440-153478-5	7/22/16	EPA 314.0, 8260B
PZ-1D-700-GW-220716	440-153478	440-153478-6	7/22/16	EPA 314.0, 8260B
PZ-1D-700-GW-220716-D	440-153478	440-153478-7	7/22/16	EPA 314.0, 8260B
PZ-1S-510-GW-220716	440-153478	440-153478-8	7/22/16	EPA 314.0, 8260B
TB-W-220716	440-153478	440-153478-9	7/22/16	EPA 8260B
TB-LW-090816 (Trip Blank)	440-155030	440-155030-1	8/9/16	EPA 8260B
PW-6D-GW-090816	440-155030	440-155030-2	8/9/16	EPA 314.0, 8260B
PW-6C-GW-090816	440-155030	440-155030-3	8/9/16	EPA 314.0, 8260B
PW-6B-GW-090816	440-155030	440-155030-4	8/9/16	EPA 314.0, 8260B
PW-5E-GW-090816	440-155030	440-155030-5	8/9/16	EPA 314.0, 8260B
PW-5D-GW-090816	440-155030	440-155030-6	8/9/16	EPA 314.0, 8260B
PW-5D-GW-090816-D	440-155030	440-155030-7	8/9/16	EPA 314.0, 8260B
PW-5C-GW-090816	440-155030	440-155030-8	8/9/16	EPA 314.0, 8260B
PW-5B-GW-090816	440-155030	440-155030-9	8/9/16	EPA 314.0, 8260B
PW-5A-GW-090816	440-155030	440-155030-10	8/9/16	EPA 314.0, 8260B
EB-LW-090816 (Equipment Blank)	440-155030	440-155030-11	8/9/16	EPA 314.0, 8260B
TB-LW-080816 (Trip Blank)	440-155061	440-155061-1	8/8/16	EPA 8260B
PW-7G-GW-080816	440-155061	440-155061-2	8/8/16	EPA 314.0, 8260B
PW-7F-GW-080816	440-155061	440-155061-3	8/8/16	EPA 314.0, 8260B
PW-7E-GW-080816	440-155061	440-155061-4	8/8/16	EPA 314.0, 8260B
PW-7D-GW-080816	440-155061	440-155061-5	8/8/16	EPA 314.0, 8260B
PW-7C-GW-080816	440-155061	440-155061-6	8/8/16	EPA 314.0, 8260B
PW-7B-GW-080816	440-155061	440-155061-7	8/8/16	EPA 314.0, 8260B
PW-7C-GW-080816-D	440-155061	440-155061-8	8/8/16	EPA 314.0, 8260B
PW-6E-GW-080816	440-155061	440-155061-9	8/8/16	EPA 314.0, 8260B
EB-LW-080816 (Equipment Blank)	440-155061	440-155061-10	8/8/16	EPA 314.0, 8260B
TB-LW-100816 (Trip Blank)	440-155254	440-155245-1	8/10/16	EPA 8260B
PW-8E-GW-100816	440-155254	440-155245-2	8/10/16	EPA 314.0, 8260B
PW-8D-GW-100816	440-155254	440-155245-3	8/10/16	EPA 314.0, 8260B
PW-8C-GW-100816	440-155254	440-155245-4	8/10/16	EPA 314.0, 8260B
PW-8B-GW-100816	440-155254	440-155245-5	8/10/16	EPA 314.0, 8260B
PW-8A-GW-100816	440-155254	440-155245-6	8/10/16	EPA 314.0, 8260B
EB-LW-108016 (Equipment Blank)	440-155254	440-155245-7	8/10/16	EPA 314.0, 8260B
TB-LW-120816 (Trip Blank)	440-155537	440-155537-1	8/12/16	EPA 8260B
IN/5W-34D25-770-GW-120816	440-155537	440-155537-2	8/12/16	EPA 314.0, 8260B
IN/5W-34D35-600-GW-120816	440-155537	440-155537-3	8/12/16	EPA 314.0, 8260B

Table I  
TestAmerica Laboratories, Inc.

Client Sample	SDG	Laboratory Number	Date Sampled	Analyses Performed
EB-LW-120816 (Equipment Blank)	440-155537	440-155537-4	8/12/16	EPA 314.0, 8260B
TB-LW-150816 (Trip Blank)	440-155681	440-155681-1	8/15/16	EPA 8260B
EMW-7D-540-GW-150816	440-155681	440-155681-2	8/15/16	EPA 314.0, 8260B
EMW-7S-470-GW-150816	440-155681	440-155681-3	8/15/16	EPA 314.0, 8260B
EB-LW-150816 (Equipment Blank)	440-155681	440-155681-4	8/15/16	EPA 314.0, 8260B
EMW-1A-470-GW-150816	440-155681	440-155681-5	8/15/16	EPA 314.0, 8260B
EMW-1A-470-GW-150816-D	440-155681	440-155681-6	8/15/16	EPA 314.0, 8260B
EMW-1B-556-GW-150816	440-155681	440-155681-7	8/15/16	EPA 314.0, 8260B
EMW-6D-584-GW-150816	440-155681	440-155681-8	8/15/16	EPA 314.0, 8260B
EMW-6D-584-GW-150816D	440-155681	440-155681-9	8/15/16	EPA 314.0, 8260B
EMW-6S-477-GW-150816	440-155681	440-155681-10	8/15/16	EPA 314.0, 8260B
EPA-MW9B-725-GW-150816	440-155681	440-155681-11	8/15/16	EPA 314.0, 8260B
EPA-MW9A-530-GW-150816	440-155681	440-155681-12	8/15/16	EPA 314.0, 8260B
EPA-MW9A-530-GW-150816D	440-155681	440-155681-13	8/15/16	EPA 314.0, 8260B
Rialto-2-990-GW-150816	440-155681	440-155681-14	8/15/16	EPA 314.0, 8260B
EMW-4C-690-GW-150816	440-155681	440-155681-15	8/15/16	EPA 314.0, 8260B
EMW-4B-605-GW-150816	440-155681	440-155681-16	8/15/16	EPA 314.0, 8260B
EMW-4A-450-GW-150816	440-155681	440-155681-17	8/15/16	EPA 314.0, 8260B
TB-LW-160816 (Trip Blank)	440-155926	440-155926-1	8/16/16	EPA 8260B
PW-2-485-GW-160816	440-155926	440-155926-2	8/16/16	EPA 314.0, 8260B
EB-LW-160815 (Equipment Blank)	440-155926	440-155926-3	8/16/16	EPA 314.0, 8260B
EMW-5C-720-GW-160816	440-155926	440-155926-4	8/16/16	EPA 314.0, 8260B
EMW-5B-615-GW-160816	440-155926	440-155926-5	8/16/16	EPA 314.0, 8260B
EMW-5A-450-GW-160816	440-155926	440-155926-6	8/16/16	EPA 314.0, 8260B
EMW-3C-640-GW-160816	440-155926	440-155926-7	8/16/16	EPA 314.0, 8260B
EMW-3B-559-GW-160816	440-155926	440-155926-8	8/16/16	EPA 314.0, 8260B
EMW-3B-559-GW-160816D	440-155926	440-155926-9	8/16/16	EPA 314.0, 8260B
EMW-3A-418-GW-160816	440-155926	440-155926-10	8/16/16	EPA 314.0, 8260B

Notes:

SDG: Sample Delivery Group

EPA 8260B: Volatile Organic Compounds (VOCs)

EPA 314.0: Perchlorate

**ATTACHMENT A**  
**DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY**  
**Assigned by AECOM Data Review Team**

**DATA QUALIFIER DEFINITIONS FOR ORGANIC ANALYSES**

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the estimated concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is estimated and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- NJ The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

**DATA QUALIFIER DEFINITIONS FOR INORGANIC ANALYSES**

- U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J The result is an estimated quantity. The associated numerical value is the estimated concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- UJ The analyte was analyzed for, but was not detected. The reported sample quantitation limit is estimated and may be inaccurate or imprecise.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control (QC) criteria. The analyte may or may not be present in the sample.